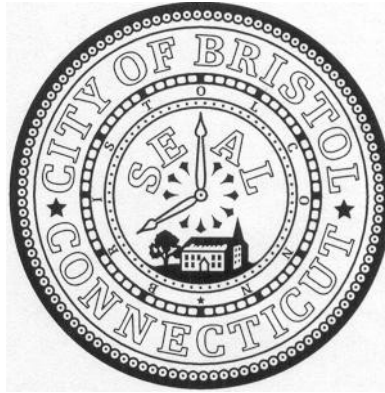


**CITY OF BRISTOL  
BRISTOL, CONNECTICUT**



Specifications For  
Contract 2C16-028

**Installation and Erection of Burn Building at Firehouse 4**

Proposal Submitted by:

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Date submitted:

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Date issued: September 15, 2015

Date Due: October 5, 2015

**RETURN THIS FORM IMMEDIATELY!**

**City of Bristol, Connecticut  
Acknowledgment: Receipt of Bid Documents**

**Project:** 2C15-028

**Title:** Installation and Erection of a  
Prefabricated Burn Building

Please take a moment to acknowledge receipt of the attached bid documents. Your compliance with this request will help us to maintain proper follow-up procedures while ensuring that all recipients have the opportunity to submit proposals.

Date Invitation to Bid was issued

September 15, 2015

Date received by you/your firm

\_\_\_\_/\_\_\_\_/\_\_\_\_

Do you plan to make a submission?

Yes\_\_\_\_ No\_\_\_\_

Print or type the following information:

Company name:

\_\_\_\_\_

Address:

\_\_\_\_\_

City or Town:

\_\_\_\_\_

Phone:

\_\_\_\_\_

Fax:

\_\_\_\_\_

Email:

\_\_\_\_\_

Received by:

\_\_\_\_\_

**Note: Faxed acknowledgments are requested**

**FAX (860) 584-6171**

**A cover sheet is NOT necessary.**

**IMPORTANT: DO NOT FAX PROPOSALS.**

**PROPOSALS MUST BE SUBMITTED IN SEALED PACKAGES**

**INDEX TO CONTRACT DOCUMENTS**  
**Contract 2C16-028**

**STANDARD BIDDING DOCUMENTS**

**Number of Pages**

001116 PUBLIC NOTICE	1 page
002113 INSTRUCTIONS TO BIDDERS	10 pages
004226 BID PROPOSAL	10 pages
004300 PREVAILING WAGE RATES	35 pages
005200 DRAFT CONTRACT FORM	5 pages
007201 GENERAL PROVISIONS	7 pages
007203 BUILDING DEPARTMENT PERMIT FEES	2 pages
119001 SPECIFICATIONS FOR INSTALLATION AND ERECTION	2 pages
131210 BUILDING SPECIFICATIONS	13 pages

**PLANS / DRAWINGS**

**Pages**

Building Drawings as provided by Fire Facilities Inc.	4
Foundation drawings as provided by Fire Facilities Inc.	2

**City of Bristol, Connecticut  
Invitation to Bid 2C16-028  
Installation and Erection of Burn Building at Firehouse 4**

The City of Bristol is seeking bids for installation and erection of a burn building for use in fire training operations, at its Firehouse 4 located at 17 Vincent P. Kelly Road, Bristol CT. The City will be directly procuring a prefabricated burn building; award of this contract shall be made for provision of all materials, labor, equipment and services required to complete all site work, concrete, and erection of the prefabricated burn building. Bid Documents may be obtained from

The City of Bristol Purchasing Department  
111 North Main Street, Second Floor  
Bristol, CT 06010

between the hours of 8:30 am and 5:00 pm Monday through Friday, or by downloading from the website noted below.

**Bids will be accepted until October 5, 2015 at 1:00 pm**, at which time bids will be opened and read. Bids received after the opening date and time will not be considered for award. The City reserves the right to waive any informalities in the bid, to reject any or all bids, and to accept the bid that in its judgment is in its best interest.

Each bid shall be in a sealed envelope addressed to the Bristol Purchasing Department, identified as "Bid 2C16-028 Burn Building" accompanied by a Bid Security in the amount of 10% of the bidders base bid amount, in the form of a Bid Bond made payable to the City of Bristol. ***The Bidder shall show evidence of erecting at least two (2) similar prefabricated burn buildings in the last five (5) year, as part of its bid submission.*** The requirements for prevailing wage rates are to apply to the resultant contract award.

The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, gender, or national origin.

Roger D. Rousseau, Purchasing Agent  
Tel (860) 584-6195  
Fax (860) 584-6171  
[rogerrousseau@bristolct.gov](mailto:rogerrousseau@bristolct.gov)  
<http://www.bristolct.gov/bids>

INSTRUCTIONS TO BIDDERS  
CITY OF BRISTOL, CONNECTICUT 06010

**Contract 2C16-028**  
**Construction of Burn Building at Firehouse 4**

The following instructions and specifications shall be observed by all Bidders:

1. **Time and Place of Bid Opening**

Bids will be opened at **1:00 pm** on **October 5, 2015** at the Purchasing Office, 111 North Main Street, Bristol, Connecticut; 06010. Any bid received after the date and time of the bid opening shall not be considered.

2. **Pre-Bid Meeting**

There is not a pre-bid meeting for this scope of work.

3. **Availability of Bid Documents**

Plans and specifications are available for immediate download via the following web address:

<http://www.bristolct.gov/bids.aspx?bidID=378>

The prospective bidder must register his name and address when securing the plans and specifications. Plans and Specifications may be secured at the address noted in Article 4 of this section. Distribution of plans and specifications is limited to one set per bidder. Bidders may request shipment of bid documents, at the bidder's sole expense.

4. **Fee for Bid Documents**

Bid Documents may be obtained at no charge (exclusive of any shipping or delivery costs) from the City of Bristol Purchasing Department, located at 111 North Main Street, Bristol CT 06010. No new print sets of plans or specifications will be issued three working days prior to the date set for bid opening.

5. **Bid Addenda**

If additional information or change shall present itself, the Purchasing Department will send such change in a written addendum not later than three days prior to the date fixed for the opening of bids to the address given by the Contractor at the time of securing the Proposal document. Failure of any bidder to receive any such addendum shall not relieve it of the obligations under its bid as submitted. All addenda so issued shall become a part of the Contract Documents. Certification of receipt of addenda shall be made by the bidder on the Proposal.

Notice of any addendum issued shall be provided (1) by first class mail and/or (2) by fax transmission; notice of said addendum are additionally posted upon release at the following website:

<http://www.bristolct.gov/bids>

Bidders are requested to acknowledge receipt of any addendum to ensure proper notification of changes to the published specifications. The City does not assume responsibility for any bidder that does not receive any addendum.

6. **Bid Bond Requirements**

A Bid Bond in the amount of ten percent (10%) of the total amount bid is required. Bid Security will be returned to all except the successful bidder upon award, and to the successful bidder upon issuance of a Purchase Order.

NO BID WILL BE ACCEPTED UNLESS ACCOMPANIED BY THE REQUIRED BID BOND.

7. **Bid Instructions**

(a) Bids must be enclosed in a sealed envelope, addressed to the City of Bristol and clearly identified with the contract number and name as shown on the face of these bid documents.

(b) Bids must be made on the attached forms with complete information as requested on the bid forms; bids submitted on other than the forms included within this document will not be considered.

8. **Examination of Site Conditions**

Bidders must satisfy themselves by personal examination of the site and location of the proposed work as to the actual conditions and requirements of the work and inform themselves fully of the conditions relating to the construction and labor under which the work will be performed. No claim because of the lack of knowledge by the Contractor regarding the site, the proposed work, or content of the specifications and drawings will be allowed. At the date fixed for opening of bids, it will be presumed that each bidder has made an examination of the location and site of work to be done under this Contract and has satisfied himself as to the actual conditions and requirements.

9. **Prevailing Wage Rates**

This project shall be to be subject to prevailing wage rates. Enclosed within these specifications are prevailing wage rates as issued by the State of Connecticut Department of Labor. The successful bidder shall include any additional costs associated with prevailing wage rates as part of its bid.

10. **Sales and Use Tax**

Bidders are reminded that the Connecticut State Sales and Use Tax, and associated Federal taxes are not applicable under this contract, and therefore these taxes are not to be included in the bid price(s).

Under terms of Regulation 16, referring to Contractors and Subcontractors, issued by the State Tax Commission in administration of the State Sales and Use Tax, the Contractor may purchase materials and supplies to be consumed in the performance of the Contract without payment of the tax and shall not include in his bid nor charge any sales or use tax thereon.

11. **Definitions**

The word "City" as used throughout these documents shall refer to the City of Bristol, Connecticut acting through its Mayor and City Council.

The phrase "Mayor" as used throughout these documents shall mean the Mayor of the City of Bristol.

The word "Director" as used throughout these documents refers to the Director of Public Works of the City of Bristol.

The word "Engineer" as used throughout these documents refers to the City Engineer of the City of Bristol.

The word "Bidder" as used throughout these documents refers to the party or parties submitting a bid to perform the work to be done or materials to be furnished under the Contract; the legal representatives of such party or parties.

The word "Contractor" as used throughout these documents refers to the party or parties contracting to perform the work to be done or materials to be furnished under the Contract; the legal representatives of such party or parties.

12. **Project Location**

The work outlined in these specifications will be performed at 17 Vincent P. Kelly Road, Bristol, CT.

13. **Intent**

The City is seeking bids for the erection and installation a two-and a half story burn building for use in fire training operations, including site work, construction of foundation, erection of structure, and all other associated work necessary for the provision of a complete burn building as defined within these specifications.

**Bidders are advised that the City has accommodated the acquisition of a prefabricated burn building**, and will directly pay for costs associated with the provision and delivery of the building to the project site. The building to be erected and installed is a Fire Facilities Inc. Model FF3 structure, with building specifications included within these specifications for use and reference.

14. **Work Schedule**

The Contractor shall coordinate with the Owner's Representative prior to the start of any work associated with this Contract. A schedule of work must be submitted and approved prior to mobilization.

The Contractor shall perform its work at times that are mutually acceptable to the Owner and the Contractor, to minimize conflict with vehicular and pedestrian traffic. Bidders are advised that other construction operations will be performed on the project site; although the area designated for the structure is separated from other construction operations, access in/out of the site must be coordinated with the Owner's Representative.

The successful Bidder/Contractor shall begin work within ten (10) calendar days after the contract signing. The beginning of work shall be considered as commenced either via onsite mobilization or via submission of a construction schedule and/or construction submittals for approval.

By joint agreement between the Engineer and the Contractor, a later date may be set for beginning work, for building production by the factory or if such delay is caused beyond the control of the Contractor or the City. Delay of submittals by the Contractor will not be sufficient to extend the Contract date.

15. **Evaluation of Prices Submitted**

In the event that unit prices are requested and such unit prices form the basis of the total bid cost, bids will be compared on the basis of the estimated quantities times unit or lump sum prices stated in the Proposal. In the event of a discrepancy between prices written in words and figures; the prices written in words shall govern. It is the intent of the City of Bristol to make award to the lowest responsible qualified bidder (reference C.G.S. 4a-59). In the event of a discrepancy between (1) the Total Amount of the bids as recorded on the bid form by the bidder and (2) the Total Amount of lump sum line items and/or unit prices as recorded on the bid form by the bidder extended by designated quantities and tabulated by the Purchasing Agent, the latter shall prevail.

16. **Engineer Estimate of Work**

The Engineer's estimate of work and material by which the bids will be compared, are as shown in the Proposal and are solely for the purpose of comparing proposals received and are approximate only and are not guaranteed. The parts of the work have been divided into items in order to allow



the bidder to bid for the different portions of the work in accordance with his estimate of their cost; so that in event of an increase or decrease of the quantities of any item of work, the actual quantity executed may be paid for at the price bid for that particular item of work.

17. **Contractor Qualifications**

Bidders, if requested, must be able to present satisfactory evidence that they are capable and fully prepared with necessary capital, personnel, materials and equipment to do the work to be contracted for under this Proposal.

The three lowest bidders may be required to complete information on their qualifications as outlined in an additional set of forms, identified as "Construction Qualification Application", available for inspection within the Purchasing Department. Such application shall be submitted in its entirety within three (3) working days of receipt of written request by the City of Bristol. Any such application is not required to be submitted at the time of bid opening.

Please note that financial information submitted with such application may remain confidential, if provided in a separate envelope clearly marked "Confidential".

18. **Certificate of Good Standing**

Any corporation whose Proposal is being considered for acceptance by the City may be required, if requested, to provide a "Certificate of Good Standing" from the Secretary of the State's Office for Connecticut.

19. **Acceptance/Rejection of Bids**

The City of Bristol may reject bids which are incomplete, conditional, obscure, contain additions not called for, erasures not properly initialed, or which contain alterations or irregularities of any kind. The City may rightfully waive informalities. The Purchasing Agent reserves the right to reject any or all bids; or the bids for any one or more commodities; or contractual services included in any or all bids; and/or to waive any informality in bids; and unless otherwise specified, to buy any part or the whole from one or more bidders when it is to the City's best interest to do so. The City also reserves the right to reject any or all bids, or to accept any bid whether the lowest or not, should the City deem it for their best interest to do so.

Determination of the best interests of the City shall include consideration of active or pending civil litigation between the City and any firm (or its subcontractor or supplier) submitting a bid to the City.

20. **Local Bidding Preference**

In the event that a local business submits a bid to the City of Bristol that is within 4% of the lowest compliant bidder and is considered to be in compliance with requirements set forth in the bid, the local business shall be allowed the opportunity to accept the award of the bid as the lowest compliant bidder, at the amount of the lower bid. Such practice shall apply to all City bids for all City departments, with the following exceptions:

1. Contracts exceeding \$1,000,000.00.
2. Professional services, awarded on subjective and objective criteria in addition to cost.
3. Contracts using state, federal, or other funds that have governing regulations disallowing such practice.
4. Contracts awarded on behalf of the Bristol Water Department as a separate enterprise fund.

21. **Withdrawal of Bid Submitted**

Any bid may be withdrawn prior to the designated closing time for receiving bids. Bids may be withdrawn 90 days after the bid opening, if no award has been made. If the City does not award a contract within ninety (90) days after the opening of bids, all bid proposals will be null and void except on mutual agreement of the City and the lowest qualified bidder, this time may be extended.

22. **Failure to Submit Bid**

Failure to return a bid may result in the company's name being removed from the Bid List. "No Bids" and responsive bids will result in Bid List retention.

23. **Contract Execution**

The person or persons whose Proposal is accepted will be required to furnish all insurance certificates in amounts as hereinafter specified, within five (5) days from the date of notice of the award; said person or persons will also be required to furnish all performance and payment bonds within three (3) days from request by the City, and at least three (3) days prior to the signing of the Contract.

The person or persons whose Proposal is accepted will be required to execute a contract, in substantially the form annexed, as scheduled by the Office of the Mayor. Once the contract is executed via formal contract signing at Bristol City Hall, the Contractor will be issued a City Purchase Order for the contract.

Contracts valued at less than \$50,000.00 may be executed directly via the issuance of a purchase order, at the discretion of the City.

24. **Inclusion of Contract Provisions**

The bidders' attention is directed to the form of this agreement, which includes as a part of it in addition to the Instructions to Bidders, Bid Proposal, General Provisions, Special Provisions, Specifications, Measurement and Payment, Contract Drawings and Standard Detail Drawings.

25. **Provision of Contract Related Documents**

Bonds and Insurance Certificates shall be submitted to the Purchasing Agent. In case of failure or refusal on the part of the bidder to enter into a contract or to furnish the required bonds and/or required insurance certificates, within the set time periods, the bidder shall forfeit to the City of Bristol such part of the bid bond as shall be equal to the difference between the total bid of the defaulting bidder, and the total bid of the person or persons with whom the contract is finally executed.

26. **Acceptance of Alternate Materials or Methods**

When alternate bids are asked for, the City at time of the awarding or prior to signing of the Contract, through its Engineer, will select which type of material or construction will be used.

27. **Indemnification**

The Contractor, in contracting for goods, services, materials, labor and the like with the City of Bristol and its respective officers, agents and servants, does hereby agree that the Contractor will indemnify and save harmless the City of Bristol, its respective officers, agents and servants from and against any and all claims, damages, losses, litigation expenses, counsel fees and compensation arising out of any injuries (including death) sustained by, or alleged to have been sustained by, the servants, employees or agents of the City of Bristol, or of the Contractor or of any participant or spectator, and from injuries (including death) sustained by, or alleged to have been sustained by, the public or any persons on or near the site, or on any other person or damage to property, real or personal, including property of the City of Bristol and their respective officers, agents and servants, caused in whole or in part by the acts or omission of the Contractor or any participant or spectator or anyone directly or indirectly employed or working for the bidder while engaged in the activity in the City of Bristol.

28. **Equal Opportunity - Affirmative Action**

The successful contractor shall comply in all aspects with the Equal Employment Opportunity Act as well as the provisions of Title VI of the Civil Rights Act of 1964 and all amendments thereto.. Each Contractor with 15 or more employees shall be required to have an Affirmative Action Plan which declares that the contractor does not discriminate on the basis of race, color, religion, gender, national origin or age and which specifies goals and target dates to assure the implementation of equal employment. Each contractor with fewer than 15 employees shall be required to have a

written equal opportunity policy statement declaring that it does not discriminate on the basis of race, color, religion, gender, national origin or age. Findings of noncompliance with applicable State and Federal equal opportunity laws and regulations could be sufficient reason for revocation or cancellation of this contract. The contract is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the State of Connecticut General Statutes.

Included within these specifications is an Employment Information Form. Firms with 15 or more employees are required to complete the form and return as part of their bid submission.

29. **Contractor's and Subcontractor's Insurance**

The awarded Contractor shall provide a certificate of insurance naming the City of Bristol as an "additional insured" in the minimum amounts as specified herein. Said insurance shall be provided at the sole expense of the Contractor with an insurance company which is licensed to do business in the State of Connecticut.

- a. **General liability** - \$1,000,000 (combined single limit) bodily injury/property damage coverage per occurrence and \$2,000,000 aggregate coverage.
- b. **Auto liability** - \$1,000,000 (combined single limit). Property damage and bodily injury coverage.

In addition to the above, the awarded contractor shall provide a certificate of insurance in the minimum amounts as specified herein. Said insurance shall be provided at the sole expense of the Contractor with an insurance company which is licensed to do business in the State of Connecticut.

- c. **Owners & Contractors Protective Insurance** policy to be provided in the name of the City of Bristol, with no deductible payable by the City, with the same limits required for the General Liability Insurance. A copy of the declaration page must be included with the certificate of insurance.
- d. **Worker's Compensation** as required by Connecticut Law.

The City of Bristol reserves the right to modify and/or change the insurance requirements. All individual modifications to the insurance limits require prior approval of the Comptroller's Office of the City of Bristol.

Certificates of coverage on motorized equipment, cars and trucks, including non-ownership and hired vehicles shall also be filed.

Any subcontractor shall be likewise covered and shall furnish certificates of coverage acceptable to the City before starting work.

All certificates of coverage shall be filed in triplicate. All policies and/or certificates shall have a ten (10) day written notice to the City of Bristol of expiration or cancellation.

30. **Bond Requirements**

For all contracts valued in excess of \$25,000.00, the awarded contractor shall provide the following bonds in the minimum amounts as specified herein.

- a. **Labor and Materials Bond** in the amount of 100% of the Total Proposal Price guaranteeing to the City payments for all labor, materials, and equipment utilized in the completion of work under the Contract in the amount of contract award.
- b. **Performance Bond**, guaranteed by Surety licensed to do business in Connecticut, in the amount of 100% of the Total Proposal Price guaranteeing to the City the completion of the Contract.
- a. **DRS Guarantee Bond** (for out-of-state contractors only); A nonresident contractor working in Connecticut and a surety company licensed to do business in Connecticut shall use Form AU-766 enclosed to post a guarantee bond with the Department of Revenue Services (DRS) for a specific project in the state.

All bonds shall be guaranteed by Surety licensed to do business in Connecticut.

It is distinctly agreed and understood that any changes in plans and/or specifications for this work, whether such changes increase or decrease the amount thereof, or the manner or time of payment, shall in no way annul, release or affect the liability and surety on the bond given by the Contractor.

31. **Permits**

The Contractor shall at its own expense take out and possess all necessary permits if required and licenses required by law and necessary for the prosecution of the work under this Contract; including the posting of all bonds and payment of all fees and charges incidental to the due and lawful prosecution of the work covered by the Contract. **Please note that the City of Bristol Building Department does not waive fees associated with this work.** Attached within these specifications is Section 5-19 of the Bristol Code of Ordinances outlining fees, for use and reference.

32. **Safety**

All work done and equipment used shall comply with all pertinent O.S.H.A., Federal, State, Municipal, and Local regulations, laws, ordinances and Regulations affecting those employed and any affecting the conduct of the work.

Not later than thirty (30) days after the date a contract is awarded, the awarded contractor shall furnish proof to the Labor Commissioner that all employees performing manual labor on or in such

public project, pursuant to such contract, have completed a course of at least ten (10) hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration, or in the case of telecommunications employees, have completed at least ten (10) hours of training in accordance with 29 CFR 1910.268.

33. **Personnel Requirements**

All work under the contract shall be performed by competent and proficient tradesman employed by the Contractor and under his supervision. Helpers and Apprentices may be used, but only under direct supervision of the job Foreman.

34. **Prevailing Wage Rates**

If designated as subject to prevailing wage rates in Item 9 of this section, the contractor shall pay its workers in accordance with the wage rates included with this specification.

35. **Subcontractors**

The Contractor shall not sublet any portion of the work without written permission. In no case may it sublet more than 49% of the monetary value of the Contract. The major units of work of the Contract shall be performed by the Contractor. If/when the Contractor sublets any part of the work, this does not relieve it or the bonding company of liabilities and obligations to the City. There is no contractual relationship between any subcontractor and the City. The Engineer deals only with the Contractor; subcontractors are recognized as employees only. For the purposes of this section, costs attributable solely to materials purchase costs shall neither be attributable to general contractor nor subcontractor.

The Contractor must not assign or dispose of his Contract in any way without the written consent of the Engineer in conjunction with that of the Mayor. Disposal must be for a cause only.

**PROPOSAL FORM  
FOR  
BURN BUILDING**



**ADDITIONS TO BRISTOL FIRE STATION NO. 4  
CITY OF BRISTOL BID NO. 2C16-028**

**PROPOSAL DUE DATE:**      **October 5, 2015**  
**TIME:**                              **1:00 PM**

**LOCATION: Bristol City Hall**  
**Purchasing Department**  
**111 North Main Street, 2<sup>nd</sup> Floor**  
**Bristol, CT 06010**

**DEADLINE FOR SUBMISSION OF QUESTIONS: Tuesday, September 29, 2015**

**Questions shall be emailed to:** Roger Rousseau, via email to [RogerRousseau@BristolCT.gov](mailto:RogerRousseau@BristolCT.gov)

**1.      MILESTONE SCHEDULE DATES**

1.      Anticipated Date of Contract Award: ..... November 2015
2.      Commence Jobsite work for the proposal: ..... March 2016
3.      Substantial completion..... June 2016

**2.      UNIT PRICES**

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. All Unit Prices submitted shall be complete in-place prices (unless noted otherwise) and include all costs for overhead, profit, labor, materials, equipment, and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Unit prices listed are for additive work. Deductive unit prices will be calculated at no less than 85% of the additive unit price (100% if used in conjunction with an allowance). The unit prices listed below are included on the proposal form. Each description is followed by the unit of measurement for the unit price.

**UNIT PRICES:**

- 1.)      Removal of unsuitable soil with replacement of structural fill ..... \$ \_\_\_\_\_ /CY
- 2.)      Disposal of unsuitable materials (unit price shall represent the  
            premium cost over general soil excavation) ..... \$ \_\_\_\_\_ /CY
- 3.)      General excavation and backfill ..... \$ \_\_\_\_\_ /CY
- 4.)      Imported common fill (material only) ..... \$ \_\_\_\_\_ /ton
- 5.)      Imported Structural Fill (material only) ..... \$ \_\_\_\_\_ /ton
- 6.)      Compacted ¾" stone ..... \$ \_\_\_\_\_ /CY
- 7.)      Concrete – material only (\$/CY) ..... \$ \_\_\_\_\_ /CY
- 8.)      Rebar – material only (\$/Ton) ..... \$ \_\_\_\_\_ /Ton

**Labor Wage Rates.** Provide labor rates which may be used, subject to review and approval, in pricing any extra work that may be required. Rates must be complete billing rates and are to include actual wages, taxes, fringes, insurance, small tools and incidentals and **15%** overhead and profit (combined). Base price on current rates in effect at time of bid. As prevailing wages and fringes rate change, these increases will be added to the labor rates

at actual cost. Wage rates are subject to audit. Copy the Wage Rate Breakdown Form attached to this Bid Package Description as many times as needed and attach a complete breakdown for each classification of worker anticipated to work on the Project, regardless of tier. The bidder may use his own form in lieu of the form provided if all of the information requested is shown.

### **3. ALTERNATE PRICES**

An Alternate Price shall include all costs associated with the changes, omissions, additions or other adjustments to the Work of this Bid Package (Contract) which are described in the Alternate, or are reasonably inferable therefrom. Claims for extras resulting from changes caused by the acceptance or rejection of any Alternate will not be allowed. Alternate Prices shall also include all costs of overhead, profit and bonds associated with the work of the Alternate, whether additive or deductive.

The Drawings, Specifications and other Contract Documents shall be considered appropriately modified by either the acceptance or rejection of the various Alternates. The Owner and the Construction Manager expressly reserve the right to accept or reject any, or all, Alternate Prices, and in any sequence prior to or after award. Acceptance or rejection of any Alternate does not relieve the Bidder of timely completion of the Work within the time periods indicated.

ALTERNATES – There are no Bid Alternates for this Contract.

### **4. ALLOWANCES**

The Bidder includes the following Allowances and rates in the total Lump Sum Amount of the Base Bid for this Bid Package. Further to Article 3.8 in the General Conditions and unless noted otherwise below, the following allowance amounts include the Trade Contractor's cost of materials less applicable discounts, delivery to the site, applicable taxes, unloading, handling, installation, allowable overhead and profit. All other costs associated with completing the work described in the allowance is included in the base bid but outside of the allowance amount. Identify the amount included in the bid on the Proposal form in the space provided.

#### **ALLOWANCES:**

1. Provide removal of 4" of unsuitable soil and replace with 4" of structural fill beneath the slab on grade. This is in addition to the 6" shown on the preliminary foundation drawings. This shall be based on unit price cost #1. State allowance value carried below. Use of this allowance is at the sole discretion of the Owner.
2. Ten Thousand Dollars for additional concrete work required based on the final design. Use of this allowance is at the sole discretion of the Owner.

The base specification for the foundation work assumes details as shown in the foundation drawings; the use of this specification makes certain assumptions about geotechnical conditions. The Owner has performed geotechnical investigations and will confirm foundation requirements subsequent to the receipt of bids for this work. Any revisions necessary to foundation construction as a result of geotech report will be paid for via this allowance, incorporating unit prices as shown within this section.



## 5. COST AND QUANTITY BREAKDOWN

In order to properly evaluate the Proposal, provide the following information. The Scope of Work to be awarded will not be influenced by the information requested here. The items listed below are not intended to be an all inclusive listing, but merely to highlight some items of work. Total of all items should equal bid price.

### THE INFORMATION LISTED BELOW IS REQUIRED AT THE TIME OF BID SUBMISSION.

Item	Quantity	Total Cost
Installation of Prefab Building Labor Cost	_____Hours	\$_____
Sitework	LS	\$_____
Concrete	_____CY	\$_____
Concrete Rebar	_____Tons	\$_____
Applicable Sales and Use Taxes	L.S.	
Bond Cost	L.S.	\$_____
Allowance #1	L.S.	\$_____
Allowance #2	_____CY	\$_____
Allowance #3	L.S.	\$_____
Other	L.S.	\$_____
Total Bid	L.S.	\$_____
Total Estimated On-Site Manhours (all tiers)	_____hours	\$_____

## 6. SCOPE OF WORK

### 1. Description of Work Included

Except for those items (if any) specifically noted in the section below entitled "Description of Work Excluded", the Work of this Bid Package shall INCLUDE all of the following:

- a. All items of work required by, and/or specified in, those Sections of the Specifications which are listed herein, under Section M SPECIFICATIONS.
- b. All items of work related to the "Scope of Work", which are shown on the Drawings listed herein under Section N Contract Drawings.
- c. The following "Significant Items of Work" are related to those required by the above referenced documents and are to be provided under, and hereby form a part of, the Scope of Work of this Bid Package (Contract). Should any conflict exist between this written scope of work and the scope of work inferred by the above referenced documents, this scope of work shall govern. All items are furnished and installed by this Trade Contractor unless noted otherwise.

### GENERAL

1. Safety is the top priority. All work will be performed in strict accordance with all Federal, State, Local Safety Regulations and the Gilbane Safety Plan. The most stringent requirements will apply. This includes **mandatory hardhats, safety glasses, steel toed shoes**. The Trade Contractor is responsible for providing their personnel with the appropriate safety gear/equipment for their work.
2. Trade Contractors will not be allowed to mobilize on-site until the following items have been submitted: Contract, Performance Labor & Material Payment Bond, Certificate of Insurance, written Safety Program and, a preliminary work schedule.
3. There will not be a watchman or guard on site. All trade contractors are responsible for security of materials, equipment and work in place until acceptance as it relates to your work.
4. Procure any and all permits, as required to complete the work of this bid package and furnish copies of all licenses and permits to the Owner. The Owner will procure the general building permit. Note that the City of Bristol will not waive any fees. Include all costs accordingly.
5. All Trade Contractors are responsible for satisfying their own temporary power requirements from source of temporary power provided as described in the Contract Documents. The temporary electric service will not be sized for trade contractor trailers, and the trade contractors must plan accordingly. All supplemental lighting and power that may be required to perform any of the work of this bid package is the responsibility of this Trade Contractor. Ensure compliance with OSHA, the Gilbane Safety Plan, the contract documents, and all agencies having jurisdiction.
6. All reference in the contract documents to the General Contractor/Contractor as performing any field work or providing services in connection with any aspect of construction shall be understood to mean this Trade Contractor.
7. Re-testing or re-inspection of deficient items will be the cost responsibility of the Trade Contractor. The Trade Contractor shall ensure to submit requests for ALL inspections to the Owner and shall ensure that the assembly to be inspected has been reviewed in advanced of the inspector. Any costs associated with re-inspection will be the trade contractor's responsibility
8. This Trade Contractor shall provide his own means and methods of conducting work.
9. A single project water source will be available at the existing building onsite. It is the Trade Contractor's responsibility to properly and safely route water as needed from that source to their use location(s) and protect water routing systems.
10. Whenever the contract documents require a certified engineer's stamp, review or report, it shall be understood to mean an engineer licensed in the applicable discipline, fully insured and registered in the State of Connecticut.
11. Demobilize/remobilize as the construction schedule, facility operations and/or weather conditions require at no extra cost.
12. Any payment for overtime work, if authorized as an extra, is for labor, and not for equipment provided on job during regular shift. If additional work is requested, authorized and directed to be performed on a time and material basis or otherwise during regular hours, the trade contractor shall provide the necessary manpower to perform the work during regular hours without impacting the progress of contract work.

13. Receive, unload, and distribute, secure and install all materials furnished by others for installation as indicated within its' specific scope of work and the contract documents.
14. All equipment used on the Jobsite shall be in good working order and maintained and operated as designed and have state of the art noise, vibration and exhaust control.
15. Subcontractor must not use building or site sewage or drainage systems for equipment cleaning purposes.
16. All Warranties and Guarantees shall commence at Project Substantial Completion and acceptance of the Work by the Owner and Prefabricator or as stated otherwise in the specifications, whichever is greater.
17. Protect all existing construction adjacent to the work of this bid package. Adequately and safely secure work whenever it is not manned and at the conclusion of each day. Protect all openings made by this Subcontractor. Protect all roof wall openings provided by others as soon as you work commences at the opening(s). Provide and maintain protection for all equipment and material provided under this contract. Refinish/touch up any surfaces damaged during construction and protect all existing construction adjacent to the work of this bid package. All costs generated by the failure to meet this requirement shall be the responsibility of this Subcontractor. Remove protection from area after completion of work and repair all damaged areas as necessary and/or required. Also include protection of workers and property.
18. Provide all shoring, bracing, staging, scaffolding and hoisting, and / or rigging required to complete your work including any breakdown of equipment required to bring the equipment into the building and install it without cutting existing or new construction. This trade contractor shall be responsible for all costs associated with making and repairing openings in existing or new construction required beyond what is indicated in the contract documents to install this work..
19. Provide all labor necessary to unload, distribute, and re-handle his material as required until such time that material is in place.
20. All costs required for transporting, erecting, dismantling, and removal of temporary facilities and equipment required by this Trade Contractor are to be included in the base bid amount.
21. Trade contractors shall participate with the inspection walkthroughs as requested by the Owner and Prefabricator. Provide suitable access for inspectors to perform all tests or inspections. Trade Contractor supplied temporary ladders and lifts to perform their work are to be available for the use of all parties for inspections.

**PROPOSAL FORM  
FOR  
ADDITIONS AND RENOVATIONS TO BRISTOL FIRE STATION NO. 4**

Pursuant to and in compliance with the Invitation to Bid relating thereto, the undersigned hereby offers and agrees to provide all materials, labor, equipment, services, and all associated costs necessary to complete all work required for the bid package(s) listed below. Any Bid Package without a dollar value shown will be interpreted as "No bid".

Burn Building:

\_\_\_\_\_ Dollars (\$) \_\_\_\_\_).

(Show amount in both words and figures. In case of discrepancy, amount shown in words will govern.)

The undersigned, having visited the site, familiarized himself/herself with the conditions present, and having carefully examined the Drawings, Bid Package, Contract Documents, and Complete Specifications together with any and all Addenda issued and received prior to the closing time for receipt of bids, hereby acknowledges that he/she is familiar with the conditions surrounding this call for bids, and is aware that the Owner and the Construction Manager reserve the right to reject any and all bids.

The undersigned further certifies under penalty of false statement that this proposal or contract has been made, submitted and executed in good faith and without collusion or fraud with any other person, and without any agreement designed to limit independent bidding or competition. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity or group of individuals.

The undersigned further certifies that he/she, or any person acting on behalf of the undersigned, has not provided or directed to be provided gifts or gratuities, as defined in Sec. 2-129(b) of the Bristol Code of Ordinances to any official or employee of the City of Bristol, or any of its agents responsible for awarding or administering this bid or contract.

The undersigned further represents that Prices listed herein include the costs of all work described in the Bid Package, including costs for all insurance premiums required to meet contractual insurance requirements; and for all premiums necessary for a Performance Bond and a Labor and Material Payment Bond in the sum of one hundred percent of the Contract price, as applicable.

**Current Experience Modification Rating ("EMR")** \_\_\_\_\_

Please note that bids submitted by firms with EMR greater than 1.0 may be considered for award solely at the discretion of the Owner.

**LICENSES:**

List here by title and number all licenses held by the bidder associated with the performance of this work.

**License Title**

**License Number**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ADDENDA RECEIVED:**

Number

Dated

_____	_____
_____	_____
_____	_____

The undersigned declares that the bidder is:

- (a) A CORPORATION organized under the laws of the State of \_\_\_\_\_ having its principal office at

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The principal officers, with their respective titles and addresses, are as follows:

Name	Title	Address
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_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- (b) A PARTNERSHIP consisting of the following individuals with their addresses:

Name	Address
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_____	_____
_____	_____
_____	_____
_____	_____

- (c) AN INDIVIDUAL by the name of \_\_\_\_\_

and doing business as \_\_\_\_\_

**Company/Name of Firm**

_____		
_____		
Witness	Signature	
Printed Name	Printed Name	
Date	Title	
_____		
Company Telephone Number	Company Fax Number	
Business Address	Mailing Address	
City/Town	State	Zip
City/Town	State	Zip

Dated at \_\_\_\_\_, \_\_\_\_\_ this  
\_\_\_\_\_ day of \_\_\_\_\_, 2010

**PREVIOUS EXPERIENCE:**

Provide at least two (2) similar prefabricated burn buildings completed in the last five (5) years of size between \$200K - \$1M for which your firm performed installation and erection.

Name of Project	Project Size \$	Project Size SF	Reference Name	Reference Phone #
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

**PROJECT ASSIGNMENTS:**

Include in this Proposal Form the name and resume for the proposed Project Manager and Project Superintendent to be assigned on this project. The proposed Superintendent must be in attendance on-site during all construction activities associated with this contract. These individuals must be furnished with a cellular phone, whose phone number will be provided to the Construction Manager. The Construction Manager reserves the right to approve or disapprove the proposed individual for both these positions:

- a. Project Manager \_\_\_\_\_
- b. Superintendent \_\_\_\_\_

**PROPOSED SUBCONTRACTORS:**

1. 

<hr/> Company name	<hr/> Telephone	<hr/> Proposed trade
<hr/> Company address	<hr/> Fax	<hr/> License number (if applicable)
<hr/> EMR		
  
2. 

<hr/> Company name	<hr/> Telephone	<hr/> Proposed trade
<hr/> Company address	<hr/> Fax	<hr/> License number (if applicable)
<hr/> EMR		
  
3. 

<hr/> Company name	<hr/> Telephone	<hr/> Proposed trade
<hr/> Company address	<hr/> Fax	<hr/> License number (if applicable)
<hr/> EMR		
  
4. 

<hr/> Company name	<hr/> Telephone	<hr/> Proposed trade
<hr/> Company address	<hr/> Fax	<hr/> License number (if applicable)
<hr/> EMR		

**BREAKDOWN OF HOURLY RATES**

**WORKERS TITLE:** \_\_\_\_\_

	<b>STRAIGHT TIME</b>	<b>ADD for 1 ½ TIME PREMIUM</b>	<b>ADD for DOUBLE TIME PREMIUM</b>
<b>BASE WAGE RATE</b>			
<b>F.I.C.A.</b>			
<b>F.U.T.A.</b>			
<b>S.U.T.A.</b>			
<b>GEN. LIABILITY INS.</b>			
<b>WORKER'S COMP. INS.</b>			
<b>WELFARE FUND</b>			
<b>PENSION FUND</b>			
<b>APPRENTICE FUND</b>			
<b>VACATION FUND</b>			
<b>ED. &amp; CULT. FUND</b>			
<b>DEFERRED INCOME FUND</b>			
<b>PAID HOLIDAYS</b>			
<b>INCIDENTALS</b>			
<b>OTHER:</b> _____			
<b>SUBTOTAL</b>			
<b>OVERHEAD &amp; PROFIT (15%)</b>			
<b>TOTAL</b>			

**SUBMITTED BY:** \_\_\_\_\_

**Not to be included in the wages above:**

<b>BOND PREMIUM</b> .....			
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Project: Additions And Renovations To Fire Station Number Four

**Minimum Rates and Classifications  
for Building Construction**

ID# : B 21213

**Connecticut Department of Labor  
Wage and Workplace Standards Division**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number:

Project Town: Bristol

State#:

FAP#:

Project: Additions And Renovations To Fire Station Number Four

CLASSIFICATION	Hourly Rate	Benefits
1a) Asbestos Worker/Insulator (Includes application of insulating materials, protective coverings, coatings, & finishes to all types of mechanical systems; application of firestopping material for wall openings & penetrations in walls, floors, ceilings	35.75	28.82
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
1c) Asbestos Worker/Heat and Frost Insulator	37.15	27.56

**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

2) Boilermaker	35.24	25.01
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3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	32.50	28.74 + a
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3b) Tile Setter	33.75	24.21
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3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
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3d) Tile, Marble & Terrazzo Finishers	26.26	20.69
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3e) Plasterer	32.50	29.45
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***As of: Friday, September 04, 2015***

Project: Additions And Renovations To Fire Station Number Four

-----LABORERS-----

4) Group 1: Laborers (common or general), acetylene burners, carpenter tenders, concrete specialists, wrecking laborers, fire watchers.	27.85	18.30
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofers/mixer/nozzleman (Person running mixer and spraying fireproof only).	28.10	18.30
4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	28.35	18.30
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections) P6 and P7 rate is \$26.80.	28.85	18.30
4d) Group 5: Air track operator, sand blaster and hydraulic drills.	28.60	18.30

**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

4e) Group 6: Blasters, nuclear and toxic waste removal.	30.85	18.30
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4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	28.85	18.30
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4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	28.38	18.30
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4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	27.86	18.30
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4i) Group 10: Traffic Control Signalman	16.00	18.30
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5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	31.45	23.54
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

5a) Millwrights	31.84	23.99
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6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	37.50	23.91 + 3% of gross wage
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7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	47.96	28.385+a+b
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-----LINE CONSTRUCTION-----

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Groundman	24.37	6.5%+10.04
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Linemen/Cable Splicer	44.30	6.5%+17.70
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

8) Glazier (Trade License required: FG-1,2)	35.08	19.35 + a
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9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	34.47	31.09 + a
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----OPERATORS----

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Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over); work boat 26 ft. and over. (Trade License Required)	37.55	23.05 + a
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Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	37.23	23.05 + a
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Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.). (Trade License Required)	36.49	23.05 + a
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	36.10	23.05 + a
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Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	35.51	23.05 + a
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Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	35.51	23.05 + a
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Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	35.20	23.05 + a
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Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and under Mandrell).	34.86	23.05 + a
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Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	34.46	23.05 + a
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	34.03	23.05 + a
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Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	31.99	23.05 + a
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Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	31.99	23.05 + a
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Group 12: Wellpoint operator.	31.93	23.05 + a
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Group 13: Compressor battery operator.	31.35	23.05 + a
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Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	30.21	23.05 + a
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**As of: Friday, September 04, 2015**



Project: Additions And Renovations To Fire Station Number Four

Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	29.80	23.05 + a
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Group 16: Maintenance Engineer/Oiler.	29.15	23.05 + a
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Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	33.46	23.05 + a
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Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	31.04	23.05 + a
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-----PAINTERS (Including Drywall Finishing)-----

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10a) Brush and Roller	31.52	19.35
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

10b) Taping Only/Drywall Finishing	32.27	19.35
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10c) Paperhanger and Red Label	32.02	19.35
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10e) Blast and Spray	34.52	19.35
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11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	40.62	28.91
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12) Well Digger, Pile Testing Machine	33.01	19.40 + a
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13) Roofer (composition)	33.70	18.23
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

14) Roofer (slate & tile)	34.20	18.23
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15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	35.74	33.22
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16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	40.62	28.91
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-----TRUCK DRIVERS-----

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17a) 2 Axle	28.58	20.24 + a
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17b) 3 Axle, 2 Axle Ready Mix	28.68	20.24 + a
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As of: Friday, September 04, 2015

Project: Additions And Renovations To Fire Station Number Four

17c) 3 Axle Ready Mix	28.73	20.24 + a
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17d) 4 Axle, Heavy Duty Trailer up to 40 tons	28.78	20.24 + a
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17e) 4 Axle Ready Mix	28.83	20.24 + a
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17f) Heavy Duty Trailer (40 Tons and Over)	29.03	20.24 + a
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17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	28.83	20.24 + a
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18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	41.37	20.37 + a
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**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

19) Theatrical Stage Journeyman	25.76	7.34
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## Project: Additions And Renovations To Fire Station Number Four

*Welders: Rate for craft to which welding is incidental.*

*\*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

*\*\*Note: Hazardous waste premium \$3.00 per hour over classified rate*

***ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$2.00 premium in addition to the hourly wage rate and benefit contributions:***

***1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)***

***2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson***

***3) Cranes (under 100 ton rated capacity)***

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyman instructing and supervising the work of each apprentice in a specific trade.

*The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.*

*Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.*

*It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.*

*The annual adjustments will be posted on the Department of Labor's Web page: [www.ct.gov/dol](http://www.ct.gov/dol). For those without internet access, please contact the division listed below.*

*The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.*

*All subsequent annual adjustments will be posted on our Web Site for contractor access.*

*Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.*

**As of: Friday, September 04, 2015**

Project: Additions And Renovations To Fire Station Number Four

*Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage*

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

**~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).**

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

**As of: Friday, September 04, 2015**

**Sec. 31-53b. Construction safety and health course. New miner training program. Proof of completion required for mechanics, laborers and workers on public works projects. Enforcement. Regulations. Exceptions.** (a) Each contract for a public works project entered into on or after July 1, 2009, by the state or any of its agents, or by any political subdivision of the state or any of its agents, described in subsection (g) of section 31-53, shall contain a provision requiring that each contractor furnish proof with the weekly certified payroll form for the first week each employee begins work on such project that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53 on such public works project, pursuant to such contract, has completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with 30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

(b) Any person required to complete a course or program under subsection (a) of this section who has not completed the course or program shall be subject to removal from the worksite if the person does not provide documentation of having completed such course or program by the fifteenth day after the date the person is found to be in noncompliance. The Labor Commissioner or said commissioner's designee shall enforce this section.

(c) Not later than January 1, 2009, the Labor Commissioner shall adopt regulations, in accordance with the provisions of chapter 54, to implement the provisions of subsections (a) and (b) of this section. Such regulations shall require that the ten-hour construction safety and health courses required under subsection (a) of this section be conducted in accordance with federal Occupational Safety and Health Administration Training Institute standards, or in accordance with Federal Mine Safety and Health Administration Standards or in accordance with 29 CFR 1910.268, as appropriate. The Labor Commissioner shall accept as sufficient proof of compliance with the provisions of subsection (a) or (b) of this section a student course completion card issued by the federal Occupational Safety and Health Administration Training Institute, or such other proof of compliance said commissioner deems appropriate, dated no earlier than five years before the commencement date of such public works project.

(d) This section shall not apply to employees of public service companies, as defined in section 16-1, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

(P.A. 06-175, S. 1; P.A. 08-83, S. 1.)



History: P.A. 08-83 amended Subsec. (a) by making provisions applicable to public works project contracts entered into on or after July 1, 2009, replacing provision re total cost of work with reference to Sec. 31-53(g), requiring proof in certified payroll form that new mechanic, laborer or worker has completed a 10-hour or more construction safety course and adding provision re new miner training program, amended Subsec. (b) by substituting "person" for "employee" and adding "or program", amended Subsec. (c) by adding "or in accordance with Federal Mine Safety and Health Administration Standards" and setting new deadline of January 1, 2009, deleted former Subsec. (d) re "public building", added new Subsec. (d) re exemptions for public service company employees and delivery drivers who perform no labor other than delivery and made conforming and technical changes, effective January 1, 2009.

# **Informational Bulletin**

## **THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE**

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is [http://www.osha.gov/fso/ote/training/edcenters/fact\\_sheet.html](http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html);
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>; or by telephone at (860)263-6790.

**THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTIMATELY ARISE CONCERNING THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.**

November 29, 2006

**Notice**  
**To All Mason Contractors and Interested Parties**  
**Regarding Construction Pursuant to Section 31-53 of the**  
**Connecticut General Statutes (Prevailing Wage)**

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

**Forklift Operator:**

- **Laborers (Group 4) Mason Tenders** - operates forklift solely to assist a mason to a maximum height of nine feet only.
- **Power Equipment Operator (Group 9)** - operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

***Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.***

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

## STATUTE 31-55a

### - SPECIAL NOTICE -

**To: All State and Political Subdivisions, Their Agents, and Contractors**

**Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.**

*Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.*

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the **contractor's** responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's Web Site. The annual adjustments will be posted on the Department of Labor Web page: [www.ctdol.state.ct.us](http://www.ctdol.state.ct.us). For those without internet access, please contact the division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.


**Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.**

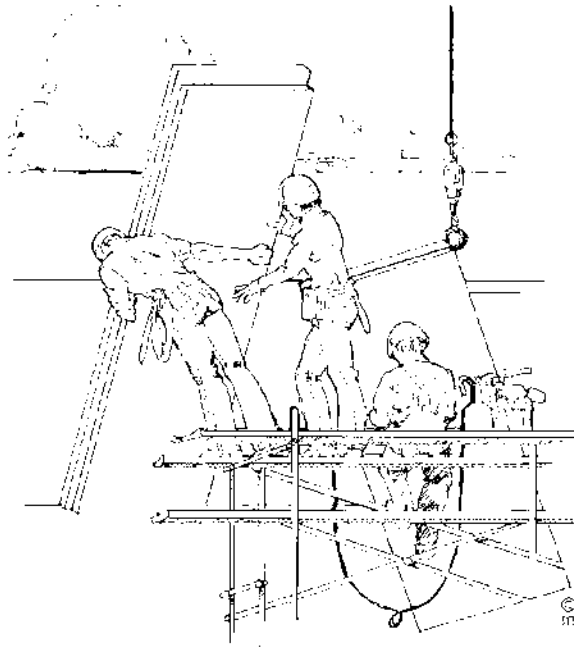
## ~NOTICE~

### TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached “Contracting Agency Certification Form” to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

 Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS DIVISION  
CONTRACT COMPLIANCE UNIT

*CONTRACTING AGENCY CERTIFICATION FORM*

I, \_\_\_\_\_, acting in my official capacity as \_\_\_\_\_,  
authorized representative title

for \_\_\_\_\_, located at \_\_\_\_\_,  
contracting agency address

do hereby certify that the total dollar amount of work to be done in connection with

\_\_\_\_\_, located at \_\_\_\_\_,  
project name and number address

shall be \$\_\_\_\_\_, which includes all work, regardless of whether such project  
consists of one or more contracts.

*CONTRACTOR INFORMATION*

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Authorized Representative: \_\_\_\_\_

Approximate Starting Date: \_\_\_\_\_

Approximate Completion Date: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Return To: Connecticut Department of Labor  
Wage & Workplace Standards Division  
Contract Compliance Unit  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

Date Issued: \_\_\_\_\_

CONNECTICUT DEPARTMENT OF LABOR  
WAGE AND WORKPLACE STANDARDS DIVISION

**CONTRACTORS WAGE CERTIFICATION FORM**  
**Construction Manager at Risk/General Contractor/Prime Contractor**

I, \_\_\_\_\_ of \_\_\_\_\_  
Officer, Owner, Authorized Rep. Company Name

do hereby certify that the \_\_\_\_\_  
Company Name  
\_\_\_\_\_  
Street  
\_\_\_\_\_  
City

and all of its subcontractors will pay all workers on the

\_\_\_\_\_  
Project Name and Number  
\_\_\_\_\_  
Street and City

the wages as listed in the schedule of prevailing rates required for such project (a copy of which is attached hereto).

\_\_\_\_\_  
Signed

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

Return to:

Connecticut Department of Labor  
Wage & Workplace Standards Division  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

*Rate Schedule Issued (Date):* \_\_\_\_\_





**\*FRINGE BENEFITS EXPLANATION (P):**

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker’s compensation, income taxes, etc.).

Please specify the type of benefits provided:

- 1) Medical or hospital care \_\_\_\_\_
- 4) Disability\_\_\_\_\_
- 2) Pension or retirement \_\_\_\_\_
- 5) Vacation, holiday\_\_\_\_\_
- 3) Life Insurance \_\_\_\_\_
- 6) Other (please specify) \_\_\_\_\_

**CERTIFIED STATEMENT OF COMPLIANCE**

For the week ending date of \_\_\_\_\_,

I, \_\_\_\_\_ of \_\_\_\_\_, (hereafter known as  
Employer) in my capacity as \_\_\_\_\_ (title) do hereby certify and state:

**Section A:**

1. All persons employed on said project have been paid the full weekly wages earned by them during the week in accordance with Connecticut General Statutes, section 31-53, as amended. Further, I hereby certify and state the following:

a) The records submitted are true and accurate;

b) The rate of wages paid to each mechanic, laborer or workman and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes, section 31-53 (h), are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection Connecticut General Statutes, section 31-53 (d), and said wages and benefits are not less than those which may also be required by contract;

c) The Employer has complied with all of the provisions in Connecticut General Statutes, section 31-53 (and Section 31-54 if applicable for state highway construction);

d) Each such person is covered by a worker’s compensation insurance policy for the duration of his employment which proof of coverage has been provided to the contracting agency;

e) The Employer does not receive kickbacks, which means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided directly or indirectly, to any prime contractor, prime contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a prime contractor in connection with a subcontractor relating to a prime contractor; and

f) The Employer is aware that filing a certified payroll which he knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years or both.
2. OSHA~The employer shall affix a copy of the construction safety course, program or training completion document to the certified payroll required to be submitted to the contracting agency for this project on which such persons name first appears.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
Submitted on (Date)



## OCCUPATIONAL CLASSIFICATION BULLETIN

The Connecticut Department of Labor has the responsibility to properly determine "job classification" on prevailing wage projects covered under C.G.S. Section 31-53.

***Note: This information is intended to provide a sample of some occupational classifications for guidance purposes only. It is not an all-inclusive list of each occupation's duties. This list is being provided only to highlight some areas where a contractor may be unclear regarding the proper classification.***

**Below are additional clarifications of specific job duties performed for certain classifications:**

- **ASBESTOS WORKERS**

- Applies all insulating materials, protective coverings, coatings and finishes to all types of mechanical systems.

- **ASBESTOS INSULATOR**

- Handle, install apply, fabricate, distribute, prepare, alter, repair, dismantle, heat and frost insulation, including penetration and fire stopping work on all penetration fire stop systems.

- **BOILERMAKERS**

- Erects hydro plants, incomplete vessels, steel stacks, storage tanks for water, fuel, etc. Builds incomplete boilers, repairs heat exchanges and steam generators.

- **BRICKLAYERS, CEMENT MASONS, CEMENT FINISHERS, MARBLE MASONS, PLASTERERS, STONE MASONS, PLASTERERS. STONE MASONS, TERRAZZO WORKERS, TILE SETTERS**

- Lays building materials such as brick, structural tile and concrete cinder, glass, gypsum, terra cotta block. Cuts, tools and sets marble, sets stone, finishes concrete, applies decorative steel, aluminum and plastic tile, applies cements, sand, pigment and marble chips to floors, stairways, etc.

- **CARPENTERS, MILLWRIGHTS. PILEDRIVERMEN. LATHERS. RESILIENT FLOOR LAYERS, DOCK BUILDERS, DIKERS, DIVER TENDERS**

- Constructs, erects, installs and repairs structures and fixtures of wood, plywood and wallboard. Installs, assembles, dismantles, moves industrial machinery. Drives piling into ground to provide foundations for structures such as buildings and bridges, retaining walls for earth embankments, such as cofferdams. Fastens wooden, metal or rockboard lath to walls, ceilings and partitions of buildings, acoustical tile layer, concrete form builder. Applies firestopping materials on fire resistive joint systems only. Installation of curtain/window walls only where attached to wood or metal studs. Installation of insulated material of all types whether blown, nailed or attached in other ways to walls, ceilings and floors of buildings. Assembly and installation of

modular furniture/furniture systems. Free-standing furniture is not covered. This includes free standing: student chairs, study top desks, book box desks, computer furniture, dictionary stand, atlas stand, wood shelving, two-position information access station, file cabinets, storage cabinets, tables, etc.

- **CLEANING LABORER**

- The clean up of any construction debris and the general cleaning, including sweeping, wash down, mopping, wiping of the construction facility, washing, polishing, dusting, etc., prior to the issuance of a certificate of occupancy falls under the Labor classification.

- **DELIVERY PERSONNEL**

- If delivery of supplies/building materials is to one common point and stockpiled there, prevailing wages are not required. If the delivery personnel are involved in the distribution of the material to multiple locations within the construction site then they would have to be paid prevailing wages for the type of work performed: laborer, equipment operator, electrician, ironworker, plumber, etc.
- An example of this would be where delivery of drywall is made to a building and the delivery personnel distribute the drywall from one "stockpile" location to further sub-locations on each floor. Distribution of material around a construction site is the job of a laborer/tradesman and not a delivery personnel.

- **ELECTRICIANS**

- Install, erect, maintenance, alteration or repair of any wire, cable, conduit, etc., which generates, transforms, transmits or uses electrical energy for light, heat, power or other purposes, including the Installation or maintenance of telecommunication, LAN wiring or computer equipment, and low voltage wiring.

**\*License required per Connecticut General Statutes: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9.**

- **ELEVATOR CONSTRUCTORS**

- Install, erect, maintenance and repair of all types of elevators, escalators, dumb waiters and moving walks.

**\*License required by Connecticut General Statutes: R-1,2,5,6.**

- **FORK LIFT OPERATOR**

- Laborers Group 4) Mason Tenders - operates forklift solely to assist a mason to a maximum height of nine (9) feet only.
- Power Equipment Operator Group 9 - operates forklift to assist any trade, and to assist a mason to a height over nine (9) feet.

- **GLAZIERS**

- Glazing wood and metal sash, doors, partitions, and 2 story aluminum storefronts. Installs glass windows, skylights, store fronts and display cases or surfaces such as building fronts, interior walls, ceilings and table tops and metal store fronts.

Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce.

- **IRONWORKERS**

- Erection, installation and placement of structural steel, precast concrete, miscellaneous iron, ornamental iron, metal curtain wall, rigging and reinforcing steel. Handling, sorting, and installation of reinforcing steel (rebar). Metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation. Installation of aluminum window walls and curtain walls is the "joint" work of glaziers and ironworkers which requires either a blended rate or equal composite workforce. Insulated metal and insulated composite panels are still installed by the Ironworker.

- **INSULATOR**

- Installing fire stopping systems/materials for "Penetration Firestop Systems": transit to cables, electrical conduits, insulated pipes, sprinkler pipe penetrations, ductwork behind radiation, electrical cable trays, fire rated pipe penetrations, natural polypropylene, HVAC ducts, plumbing bare metal, telephone and communication wires, and boiler room ceilings. Past practice using the applicable licensed trades, Plumber, Sheet Metal, Sprinkler Fitter, and Electrician, is not inconsistent with the Insulator classification and would be permitted.

- **LABORERS**

- Acetylene burners, asphalt rakers, chain saw operators, concrete and power buggy operator, concrete saw operator, fence and guard rail erector (except metal bridge rail (traffic), metal bridge handrail, and decorative security fence installation.), hand operated concrete vibrator operator, mason tenders, pipelayers (installation of storm drainage or sewage lines on the street only), pneumatic drill operator, pneumatic gas and electric drill operator, powermen and wagon drill operator, air track operator, block paver, curb setters, blasters, concrete spreaders.

- **PAINTERS**

- Maintenance, preparation, cleaning, blasting (water and sand, etc.), painting or application of any protective coatings of every description on all bridges and appurtenances of highways, roadways, and railroads. Painting, decorating, hardwood finishing, paper hanging, sign writing, scenic art work and drywall hanging+ for any and all types of building and residential work.

- **LEAD PAINT REMOVAL**

- Painter's Rate
  1. Removal of lead paint from bridges.
  2. Removal of lead paint as preparation of any surface to be repainted.
  3. Where removal is on a Demolition project prior to reconstruction.
- Laborer's Rate
  1. Removal of lead paint from any surface NOT to be repainted.
  2. Where removal is on a TOTAL Demolition project only.

- **PLUMBERS AND PIPEFITTERS**

- Installation, repair, replacement, alteration or maintenance of all plumbing, heating, cooling and piping.

**\*License required per Connecticut General Statutes: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2 S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4.**

- **POWER EQUIPMENT OPERATORS**

- Operates several types of power construction equipment such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers or motor graders, etc. Repairs and maintains equipment.

**\*License required, crane operators only, per Connecticut General Statutes.**

- **ROOFERS**

- Covers roofs with composition shingles or sheets, wood shingles, slate or asphalt and gravel to waterproof roofs, including preparation of surface. (tear-off and/or removal of any type of roofing and/or clean-up of any and all areas where a roof is to be relaid)

- **SHEETMETAL WORKERS**

- Fabricate, assemble, install and repairs sheetmetal products and equipment in such areas as ventilation, air-conditioning, warm air heating, restaurant equipment, architectural sheet metal work, sheetmetal roofing, and aluminum gutters. Fabrication, handling, assembling, erecting, altering, repairing, etc. of coated metal material panels and composite metal material panels when used on building exteriors and interiors as soffits, fascia, louvers, partitions, wall panel siding, canopies, cornice, column covers, awnings, beam covers, cladding, sun shades, lighting troughs, spires, ornamental roofing, metal ceilings, mansards, copings, ornamental and ventilation hoods, vertical and horizontal siding panels, trim, etc. The sheet metal classification also applies to the vast variety of coated metal material panels and composite metal material panels that have evolved over the years as an alternative to conventional ferrous and non-ferrous metals like steel, iron, tin, copper, brass, bronze, aluminum, etc. Insulated metal and insulated composite panels are still installed by the Iron Worker. Fabrication, handling, assembling, erecting, altering, repairing, etc. of architectural metal roof, standing seam roof, composite metal roof, metal and composite bathroom/toilet partitions, aluminum gutters, metal and composite lockers and shelving, kitchen equipment, and walk-in coolers.

- **SPRINKLER FITTERS**

- Installation, alteration, maintenance and repair of fire protection sprinkler systems.

**\*License required per Connecticut General Statutes: F-1,2,3,4.**

- **TILE MARBLE AND TERRAZZO FINISHERS**

- Assists and tends the tile setter, marble mason and terrazzo worker in the performance of their duties.

- **TRUCK DRIVERS**

- **Definitions:**

- 1) "Site of the work" (29 Code of Federal Regulations (CFR) 5.2(l)(b) is the physical place or places where the building or work called for in the contract will remain and any other site where a significant portion of the building or work is constructed, provided that such site is established specifically for the performance of the contract or project;
      - (a) Except as provided in paragraph (l) (3) of this section, job headquarters, tool yards, batch plants, borrow pits, etc. are part of the "site of the work"; provided they are dedicated exclusively, or nearly so, to the performance of the contract or project, and provided they are adjacent to "the site of work" as defined in paragraph (e)(1) of this section;
      - (b) Not included in the "site of the work" are permanent home offices, branch plant establishments, fabrication plants, tool yards etc, of a contractor or subcontractor whose location and continuance in operation are determined wholly without regard to a particular State or political subdivision contract or uncertain and indefinite periods of time involved of a few seconds or minutes duration and where the failure to count such time is due to consideration justified by industrial realities (29 CFR 785.47)
    - 2) "Engaged to wait" is waiting time that belongs to and is controlled by the employer which is an integral part of the job and is therefore compensable as hours worked. (29 CFR 785.15)
    - 3) "Waiting to be engaged" is waiting time that an employee can use effectively for their own purpose and is not compensable as hours worked. (29 CFR 785.16)
    - 4) "De Minimus" is a rule that recognizes that unsubstantial or insignificant periods of time which cannot as a practical administrative matter be precisely recorded for payroll purposes, may be disregarded. This rule applies only where there are uncertain and indefinite periods of time involved of a short duration and where the failure to count such time is due to consideration justified by worksite realities. For example, with respect to truck drivers on prevailing wage sites, this is typically less than 15 minutes at a time.

- **Coverage of Truck Drivers on State or Political subdivision Prevailing Wage Projects**

- Truck drivers **are covered** for payroll purposes under the following conditions:
    - Truck Drivers for time spent working on the site of the work.
    - Truck Drivers for time spent loading and/or unloading materials and supplies on the site of the work, if such time is not de minimus.
    - Truck drivers transporting materials or supplies between a facility that is deemed part of the site of the work and the actual construction site.
    - Truck drivers transporting portions of the building or work between a site established specifically for the performance of the contract or project where a significant portion of such building or work is constructed and the physical



places where the building or work outlined in the contract will remain.

*For example: Truck drivers delivering asphalt are covered under prevailing wage while “engaged to wait” on the site and when directly involved in the paving operation, provided the total time is not “de minimus”*

- Truck Drivers **are not covered** in the following instances:
  - Material delivery truck drivers while off “the site of the work”
  - Truck Drivers traveling between a prevailing wage job and a commercial supply facility while they are off the “site of the work”
  - Truck drivers whose time spent on the “site of the work” is de minimus, such as under 15 minutes at a time, merely to drop off materials or supplies, including asphalt.

*These guidelines are similar to U.S. Labor Department policies. The application of these guidelines may be subject to review based on factual considerations on a case by case basis.*

**For example:**

- Material men and deliverymen are not covered under prevailing wage as long as they are not directly involved in the construction process. If, they unload the material, they would then be covered by prevailing wage for the classification they are performing work in: laborer, equipment operator, etc.
- Hauling material off site is not covered provided they are not dumping it at a location outlined above.
- Driving a truck on site and moving equipment or materials on site would be considered covered work, as this is part of the construction process.

*Any questions regarding the proper classification should be directed to:*

*Public Contract Compliance Unit  
Wage and Workplace Standards Division  
Connecticut Department of Labor  
200 Folly Brook Blvd, Wethersfield, CT 06109  
(860) 263-6543*

**Connecticut Department of Labor  
Wage and Workplace Standards Division  
FOOTNOTES**

- ⇒ Please Note: If the “Benefits” listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the “Benefits” section for the occupation lists only a dollar amount, disregard the information below.

**Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons**  
(Building Construction) and  
(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

- a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

**Elevator Constructors: Mechanics**

- a. Paid Holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Veterans’ Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

**Glaziers**

- a. Paid Holidays: Labor Day and Christmas Day.

**Power Equipment Operators**  
(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year’s Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

### **Ironworkers**

- a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

### **Laborers (Tunnel Construction)**

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

### **Roofers**

- a. Paid Holidays: July 4<sup>th</sup>, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

### **Sprinkler Fitters**

- a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

### **Truck Drivers**

(Heavy and Highway Construction & Building Construction)

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

## CONSTRUCTION CONTRACT

**THIS AGREEMENT**, made and concluded by and between the **City of Bristol**, a Municipal Corporation organized and existing under the laws of the State of Connecticut, acting herein by its Mayor, duly authorized, hereinafter designated the "City", party of the first part and **[CONTRACTOR NAME]** (being the party named in the attached copy of the Proposal), hereinafter designated the "Contractor", party of the second part.

**WITNESSETH**, that said Contractor has agreed, and by these presents does for its, their, or its heirs, executors, administrators, successors, and assigns covenant, promise and agree to and with the said City for the consideration hereinafter mentioned and contained, and under the penalty expressed in Bonds hereunto annexed, that said Contractor shall and will, at his, its, or their own proper charge, costs and expense do and perform all the work and furnish all materials and labor necessary or proper, and build in good, firm and in substantial manner, with appurtenances of every kind complete in accordance with this Contract and the specifications which are a part hereof, and in accordance with such further plans and directions as have been made or may be made from time to time the work referred to as "**2CXX-xxx PROJECT NAME**" in the amount of \_\_\_\_\_ Dollars and \_\_\_\_ cents (\$XXX,XXX.xx).

All to be in accordance with the terms of the Proposal for said work submitted to the City of Bristol on **[date]** and accepted by said City on **[date]** and made a part of this Contract.

The Instructions to Bidders, the Bid Proposal, General Provisions, the Specifications, together with Special Provisions, Addenda and the Bonds and any and all additions which may be inserted or attached to any or all of the sections listed above, together with the drawings named in the Instructions to Bidders are made a part of this Contract. The general features of said work are shown in the drawings referred to above which are made a part of this Contract. The Engineer shall furnish the Contractor with additional plans as may be necessary to show the details of construction, which are to be considered as illustrating the requirements and specifications set forth in this Contract and are to be followed by the Contractor in carrying out the work done hereunder. All work is to be performed under the direction and inspection of the City Engineer who shall interpret the intent and methods described in the plans and specifications.

The Contractor agrees to indemnify, defend, and save harmless, the City of Bristol, as well as its officers, agents, and employees from any and all claims and losses accruing or resulting from the performance of this Contract, and from any and all claims and losses accruing or resulting to any person, firm or Corporation who may be injured or damaged by the Contractor in the performance of this Contract.

The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (h) of C.G.S. 31-53, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

**IN WITNESS WHEREOF**, the parties hereto have hereunto set their hands and seals this\_\_\_\_\_ day of \_\_\_\_\_, 20XX.

Signed in the presence of:

\_\_\_\_\_  
\_\_\_\_\_

**The City of Bristol, Connecticut**

By: \_\_\_\_\_  
Mayor Kenneth B. Cockayne

Signed in the presence of:

\_\_\_\_\_  
\_\_\_\_\_

**[CONTRACTOR NAME]**

By: \_\_\_\_\_  
(OFFICER NAME AND TITLE)

This Contract was **approved by vote of the City Council** of Bristol, Connecticut on the \_\_\_\_\_ day of \_\_\_\_\_, 20XX.

\_\_\_\_\_  
City Clerk

**Approved as to Form**  
Office of Corporation Counsel

By \_\_\_\_\_  
\_\_\_\_\_  
20XX

**Approved as to Technical Content**  
Department of Public Works

By \_\_\_\_\_  
\_\_\_\_\_  
20XX

**Approved as to Appropriations**  
Board of Finance, City of Bristol, Connecticut

By \_\_\_\_\_  
\_\_\_\_\_  
20XX

STATE OF CONNECTICUT   )  
  ) SS. BRISTOL  
COUNTY OF HARTFORD   )

On this the \_\_\_\_\_ day of \_\_\_\_\_, before me, the undersigned officer, personally appeared Kenneth B. Cockayne, who acknowledged himself to be the Mayor of the City of Bristol, a municipal corporation, and that he, as such Mayor, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as Mayor.

\_\_\_\_\_  
Commissioner of the Superior Court

Notary Public

My Commission Expires:

STATE OF CONNECTICUT   )  
  ) SS. BRISTOL  
COUNTY OF HARTFORD   )

On this the \_\_\_\_\_ day of \_\_\_\_\_, 20XX before me, the undersigned officer, personally appeared **[OFFICER NAME]** who acknowledged himself/herself to be **[OFFICER TITLE]** of **[COMPANY NAME]**, a corporation, and further acknowledged that said corporation is incorporated in the State of Connecticut and is now in good standing, and that he/she, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the Corporation by himself/herself as **[OFFICER TITLE]**.

\_\_\_\_\_  
Commissioner of the Superior Court

Notary Public

My Commission Expires:



**WAIVER OF NOTICE OF SPECIAL MEETING  
OF THE BOARD OF DIRECTORS**

The undersigned, being all of the Board of Directors of [**COMPANY NAME**]

hereby waive written notice of a Special Meeting of the Board of Directors to be held at the Office  
of \_\_\_\_\_

on \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_ a.m./p.m.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## **007201 GENERAL PROVISIONS FOR BUILDINGS CONSTRUCTION**

### **1. DISCREPANCIES, ERRORS AND OMISSIONS:**

The specifications are intended to be explanatory of each other, but should any discrepancy appear or any misunderstanding arise as to the import of anything contained in either, the interpretation and decision of the Engineer shall be final and binding on both parties to the Contract. Each section shall be a complete job and work implied shall be done as if specified or shown on the plans or required for a complete job under the respective work and shall be done by the Contractor without extra charge.

### **2. SUBMITTALS:**

The Contractor shall submit details or written statements of methods for the various units of the work as required by the Engineer, all of which shall be subject to the approval of the Engineer.

### **3. CONTRACTOR RESPONSIBLE FOR ENTIRE WORK UNTIL ACCEPTED:**

The Contractor shall have charge of and be responsible for the entire work until its final completion and acceptance, and any imperfect or unfaithful work or defective materials that may be discovered at any time before the final completion and acceptance of the work or work injured or destroyed by the elements or the public, shall be corrected immediately on the requirement of the Engineer.

The City will provide sufficient personnel for the inspection of the work. The Engineer shall at all times have access to the work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and for inspection. The presence of an inspector shall not relieve the Contractor of responsibility because of failure due to poor materials or workmanship and if the work is obviously constructed in error.

### **4. WORK AND MATERIALS TO BE OF BEST QUALITY:**

All work done and materials furnished shall be new and of the best quality customarily used in or furnished for installations of this type. All materials shall be used in conformance with the manufacturer's recommendations. The absence of requirements or details in the specifications or drawings which are usually included in first-class work of this kind shall not excuse the Contractor for their omission in his work.

The Contractor shall promptly remove from the premises all materials condemned by the Engineer as failing to meet Contract requirements, whether incorporated in the work or not, and the Contractor shall promptly replace and re-execute his own work in accordance

with the Contract and without expense to the City, and shall bear the expense of making good all work by other contractors destroyed or damaged by such removal or replacement.

If the Contractor does not remove such condemned work and materials as promptly as possible after written notice, the Engineer may remove them and store the materials at the expense of the Contractor.

**5. DEFECTIVE WORK:**

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his Contract as herein specified, and any defective work shall be made good, and any unsuitable materials shall be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. This shall cover any material furnished by the City which shall be damaged or rendered defective by handling or improper installation by the Contractor, his agents or employees and shall be made good and replaced at the Contractor's own expense.

If the Engineer deems it inexpedient to correct work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract price shall be made there for.

**6. WORKERS, SUPERVISION, AND MAINTENANCE:**

The Contractor shall employ only competent, faithful, skilled, and proficient tradespeople to do the work required of them, and whenever the Engineer shall inform him that any man on the work is in his opinion incompetent or unfaithful, he shall discharge him from the work and shall not again employ him for work under this Contract. The Contractor shall at all times enforce strict discipline and good order among his employees. Helpers and Apprentices may be used, but only under direct supervision of the Job Foreman.

The Contractor shall keep a competent superintendent on the Project whenever work is being done, who shall receive orders in the Contractor's absence and shall obey them as if received by him personally.

Any Contractor whose place of business is located outside the City must make arrangements satisfactory to the Engineer for emergency repair work or protection that may be necessary during periods of shutdown of the work. If this is not done, the Engineer will make arrangements and any cost will be deducted from monies due the Contractor.

**7. COMPLIANCE WITH LAW:**

The Contractor shall keep himself informed of all existing laws, State, Federal, Municipal Ordinances and Regulations affecting those employed and any affecting the conduct of the

work and shall protect and indemnify the City of Bristol, its officers and agents against any claim or liability arising from or based upon violation of any such law, ordinance, regulation, order of decree, whether by himself or his employees. All work performed and equipment used shall comply with all pertinent OSHA, Federal, State and Local Regulations.

**8. OBLIGATION AND LIABILITY OF CONTRACTOR:**

The Contractor shall do all the work and furnish all the materials, tools and appliances unless otherwise specified and everything necessary or proper for performing and completing the work and within the time specified herein. He shall complete the work to the satisfaction of the Engineer and at the prices in the Proposal or as agreed under extra work.

The Contractor shall take all responsibility for work done under this Contract, for protection of work, for injuries to employees, for injuries to the public and damage to property and utilities on or about the work and the responsibility of anyone hired by him directly or indirectly. The Contractor shall assume the defense of all claims of whatsoever character against the Contractor, the City, and shall indemnify, save harmless and insure the City, its officers or agents against all claims arising from the work under this Contract.

**9. SUBLETTING OR ASSIGNMENT:**

The Contractor shall not sublet any portion of the work without written permission. In no case may he sublet more than 49% of the monetary value of the Contract without express acceptance by the City (i.e. the major units of work of the Contract shall be performed by the Contractor).

If the Contractor sublets any part of the work, this does not relieve him or the bonding company of liabilities and obligations to the City. There is no contractual relationship between any subcontractor and the City. The Engineer deals only with the Contractor; subcontractors are recognized as employees only. For the purposes of this section, costs attributable directly to equipment or material purchase costs shall neither be attributable to general contractor nor subcontractor.

**10. WORK AREA:**

The Contractor shall take all proper precautions to protect from injury or unnecessary interference, and provide proper means of access to abutting property where the existing access is cut off by the Contractor.

The Contractor shall take all proper precautions to protect persons from injury or unnecessary inconvenience and leave an unobstructed way along the public and private places for travelers, vehicles, and access to hydrants.

The Contractor shall make arrangements with the adjacent property owners for such trespass as he may reasonably anticipate in the performance of the work. All such arrangements shall be reported, in writing, to the Engineer.

The Contractor shall continuously maintain adequate protection of all work from damage, and shall take all reasonable precautions to protect the Town from injury or loss arising in connection with the Contract.

The Contractor shall adequately protect adjacent private and public property as provided by law and the Contract Documents. The Contractor shall make good any damage, injury, or loss of work and to the property of the City resulting from lack of reasonable protective precautions.

The Contractor shall conduct his work so as to minimize damage to existing improvements designated to remain. Except where specifically stated otherwise in the specifications, drawings, or as directed by the Engineer, it will be the responsibility of the Contractor to restore to their original condition, as near as practical, all improvements on public or private property.

During the work, the Contractor shall not deposit material in such a manner so as to block or interfere with normal activities within the area. The Contractor shall erect adequate barricades as required to protect pedestrians from the work area.

During the progress of the work, during any shutdown, and until final acceptance of the work; the Contractor shall maintain all areas within its control. Should the Contractor fail to perform such work upon order of the Engineer within a reasonable time, the Engineer will make arrangements to have the necessary work done and the cost of said work deducted from monies due the Contractor.

The Contractor shall make arrangements for disposal of surplus materials. The cost of disposal, landfill permits, associated dumping fees, shall be considered included in the total bid amount. The job site shall be left in a clean condition meeting the full satisfaction of the Engineer.

**11. EXTRA WORK:**

The Owner, without invalidating the contract documents, may order extra work or make changes by altering, adding to or deducting from the work, the contract price being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim of extension of time caused thereby shall be adjusted at the time of ordering the change.

No extra work or change shall be performed unless in pursuance of a written order from the Owner/Engineer, with the agreed price prior to the commencement of the work, and no claim for an addition to the contract price shall be valid unless so ordered.

Any increase shall be paid for according to work actually done and at the prices established for such or like work in the Contract or, in case no such price is established, then at actual reasonable cost as determined by the Engineer and the Contractor, as Lump Sum or Unit Prices as mutually agreed to before starting work or at actual cost plus as agreed to.

For work done under "Cost Plus", the compensation shall be as follows:

- (a) Monies actually paid for labor and foreman as required **and as shown on the payroll** plus 15% to cover insurance, taxes, social security, etc.
- (b) Actual cost for material used on job.
- (c) Power operated equipment as set forth in the equipment schedule applying to like jobs.

If equipment rental rates are agreed to, no percentage shall be added to these amounts.

Full payment shall be the sum of the above items which apply plus 15% for overhead and profit. Any extra work by a subcontractor will be computed as above specified, with 10% for overhead and profit for the General Contractor.

## **12. PROGRESS AND FORFEITURE OF CONTRACT:**

If at any time the Engineer shall be of the opinion that the said work is unnecessarily delayed, and will not be finished in the prescribed time, or that the Contractor is willfully violating any of the conditions of the Contract, or is executing the same in bad faith, he shall notify the Contractor, in writing, to that effect. If the Contractor does not, within five (5) days thereafter, take such measures as will in the judgment of the Engineer insure the satisfactory completion of the work, the Engineer may then, in writing, notify the Contractor to discontinue all the work under the Contract. The Contractor shall immediately respect said notice and stop work and cease to have any rights to possession of the ground and shall not remove any portion of the plant or any materials after receiving such notice. The Engineer shall notify the Contract Surety, in writing, of his action and the reason(s) for such action. The Engineer shall report his actions to the City together with the reason(s) for such actions.

The City shall take such action as it deems necessary to complete the work under the Contract to the City's satisfaction. The City may rescind its notice to the Contractor to discontinue work and order the Contractor to complete the Contract within such terms as it may specify or the City may inform the Contract Surety of its (Contract Surety's) responsibility to complete the work as specified under the terms of the Contract. Surety shall elect to complete the work or have the City complete it. If the City completes the

work, it shall thereupon have the power to direct the Engineer to place such and so many persons as he may deem advisable by contract, or otherwise, to work at and complete the work herein described and to use such materials as he may find upon the line of said work, or to procure other materials for the completion of the same and to charge the expense, whether of labor or materials, or otherwise. to the Contract and the expense so charged shall be deducted and paid by the City out of such monies as may be then due or may at any time thereafter become due to the Contractor under and by virtue of the Contract or any part thereof; and in case such expense is less than the sum which would have been payable under the Contract if the same had been completed by the Contractor, said Surety shall be entitled to receive the difference. In case such expense is greater, the Contract Surety shall pay the amount of such excess due to the City.

**13. DELAY IN TIME OF COMPLETION, NO CLAIM FOR DAMAGES:**

The City may reasonably delay the beginning of the work or any part thereof, if necessary because of weather conditions. The Contractor shall have no claim for damages on account of said reasonable delay, but if a time clause is carried in the Contract, so much additional time shall be allowed as the Engineer computes such delay has influenced the completion by the Contractor. The Engineer shall certify such additional time in writing.

In case the Contractor shall suffer damage from loss of time, where the same is caused by or under the direction of the City, the condition of the weather, or by any circumstances so unusual that they could not be foreseen previous to or avoided during the construction of the work (all of which shall be determined by the Engineer who shall certify the same in writing); the time during which work was so suspended shall be excluded and the time of completion extended by a corresponding number of days.

Neither an extension of time for any reason beyond the date fixed for the completion of the work, nor the acceptance of any part of the work comprised in these specifications subsequent to the said date, shall be deemed to be a waiver by the said Contractor of the right to abrogate the Contract for abandonment or delay in the manner herein provided.

**14. STORAGE OF MATERIALS AND EQUIPMENT:**

The Contractor shall make arrangements to store his material, vehicles, equipment, etc. During the prosecution of the work, the Contractor shall not store material, equipment, vehicles, etc. within any area in such a manner so as to block or interfere with the flow of any other work.

**15. GUARANTEES:**

The Contractor shall guarantee all his work to be free from defects due to workmanship or material used for a period of one (1) year from the final completion of all work on the

Contract. Said one (1) year period shall begin on the date of payment of the semi-final estimate by the City.

Should the Contractor, during the guarantee period upon notification by the Engineer in writing within five (5) days, fail to begin making necessary repairs to the satisfaction of the Engineer, action may be taken by the Engineer to have the repairs made either by using the City's own men and equipment, by force account or cost plus method, or by contract between the City and a contractor selected by the City. The cost shall be taken from monies due the Contractor. Any cost exceeding that held shall be paid by the Contractor or the City may call upon the bond Surety to pay said extra cost.

**16. CONTRACTOR, HIS INSURANCE CARRIER AND BOND SURETY, LIABLE FOR CLAIMS OR DAMAGES:**

It shall be the duty of the Contractor and his Insurance Carrier and Bond Surety to indemnify and save harmless the City from all suits or actions of any name or description, brought against them or the City for or on account of any injuries or damages received or sustained by any party or parties by or from the Contractor, his agents or employees in the construction of the work, or in consequence of any negligence in guarding the same or any improper materials used in its construction or by or on account of any act or omission of the Contractor, his agents or employees.

**17. SUBSTANTIAL COMPLETION:**

The date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Architect/Engineer when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion for the use for which it is intended.

**18. RELEASE OF BONDS:**

The Performance Bond and Labor and Material Payment Bond shall not be released until final payment and final acceptance of the entire work is made as a guarantee against claims and suits that may be entered against the City for actions or negligence of the Contractor in the performance of the work. With the exception of the final payment, five percent (5%) of all payments shall be retained to guarantee the repairs that may be ordered by the Engineer for defective materials or workmanship during the one (1) year maintenance period. The City reserves the right to retain in excess of the 5% should it deem additional guarantee necessary for legal claims against the City resulting from actions under this Contract.



## City of Bristol, Connecticut Building Department Fees

as Listed in the Code of Ordinances for the City of Bristol

### Sec. 5-19. - Fees.

- (a) **Generally.** No permit to begin work for new construction, alteration, removal, demolition or other building operation shall be issued until the fees prescribed in this section shall have been paid to the building official or other authorized municipal agency, nor shall an amendment to a permit necessitating an additional fee because of an increase in the estimated cost of the work involved be approved until the additional fee shall have been paid. A late fee of \$100.00 will be assessed if applicable.
- (b) **Special fees.** The payment of the fee for the construction, repair, alteration, removal or demolition and for all work done in conjunction with or concurrent with work contemplated by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are described further in this section or by ordinance in regards to plumbing permits, heating permits, electrical permits, sewer excavation or street opening permits, erection of signs and display structures, marquees or other appurtenant structures, certificates of use and occupancy or other privileges or requirements, both within and without the jurisdiction of the department of building inspection. All of the following fee charges to include State of Connecticut Education fee amount.
- (c) **Square foot area.** For the determination of any permit fee based on square foot area, such area shall be computed taking the extreme measurements from outside walls and including garages, breezeways and the like.
- (d) **Right of inspector to ask subcontractors for actual cost.** It will be the right of the inspector to ask for an affidavit as to the actual cost of the job and the subcontractor shall be responsible for additional permit fees for the difference between the estimated and actual costs.
- (e) **Reserved.**
- (f) **Fees for new construction.** The fee for a building permit for all new construction excluding all subcontracts such as plumbing, heating, electrical, etc. on residential building, shall be at the rate of forty cents (\$0.40) per square foot of area. On commercial or industrial building, said fee shall be at the rate of fifty cents (\$0.50) per square foot of area. Area will be computed by taking the ground floor times the number of stories. The fee for accessory buildings, garages, open breezeways, greenhouses, rigid frame or steel skeletal buildings for truck, heavy equipment or all-purpose storage, shall be at the rate of twenty cents (\$0.20) per square foot of area. The minimum permit fee shall be twenty two dollars (\$22.00). There will be no maximum fee. No fee will be waived. Permits are required for all swimming pools, for which the minimum permit fee shall be twenty two dollars (\$22.00).



- (g) **Fees for subcontractor permits.** Fees for permits for licenses issued by the state occupational licensing boards will be based on the estimated costs of the proposed work as follows:
- (1) Estimated cost up to \$1,000.00 \$22.00 permit fee
  - (2) For each additional \$1,000.00 of estimated cost or fraction thereof, add \$15.00 to permit fee
- (h) **Alteration and moving of buildings.** The fee for a building permit for alterations to building or structures, or to move a building or structure from one lot to another or to a new location shall be based on the estimated cost of foundation and all work necessary to place the building or structure in its completed condition at its new location as follows:
- (1) Estimated cost up to \$1,000.00 \$22.00 permit fee
  - (2) For each additional \$1,000.00 of estimated cost or fraction thereof, add \$15.00 to permit fee
- (i) **Demolition.** The fee for a permit for demolition of a building shall be based on estimated cost in accordance with the schedule (g) of this section.
- (j) **Signs.** Fees for signs for which a permit is required by the state building code shall be based on estimated cost in accordance with the schedule in subsection (g) of this section.
- (k) **Certificates of occupancy.** The fee for a certificate of occupancy of a building shall be:
- (1) Certificates of occupancy:
 

Residential	\$17.00
Commercial, industrial	\$27.00
Temporary	\$75.00
  - (2) Reinspection \$35.00 for first, second and third reinspections
  - (3) Reinspection fee \$50.00 after third inspection
- (l) **Zoning permit fee** \$17.00
- (m) **Fences.** The fee for fences erected on any property in Bristol shall be based upon estimated cost in accordance with the schedule (g) of this section plus the zoning permit fee.

## **Sec. 5-20. - Suspensions and revocations.**

Any permit may be revoked or suspended by the building inspector for violation of the state building code or for failure to comply with lawful orders pursuant to such code, this chapter or amendments thereto issued by duly constituted authority.

**CONTRACT 2C16-028 SECTION 11 90 01**  
**SPECIFICATIONS FOR INSTALLATION AND ERECTION**  
**OF PREFABRICATED BURN BUILDING**

1. The City of Bristol will be directly procuring a prefabricated burn building by Fire Facilities model FF3 Deputy Chief. Provide all materials, labor, equipment and services required to complete all site work, concrete, and erection of the prefabricated burn building.
2. ***The Bidder shall show evidence of erecting at least two (2) similar prefabricated burn buildings in the last five (5) years. Submit with your bid reference information.***
3. The burn building will be the Deputy Chief model FF-3 with the following additional items (refer to Section 131210). Provide installation for these items accordingly.
  - a) Galvanized Stair/Stair Accessories
  - b) 10' Tall Fire Escape With (1) 3070 Prehung Door
  - c) (1) Ships Ladder
  - d) (8) Forged Swivel Rappelling Anchors (5000 lb - OSHA Rated)
  - e) (1) 2'-6" x 4'-6" Bilco Roof Hatch
  - f) (1) 8' x 7' Roll-Up Door
  - g) (2) 3'-0" x 3'-0" Milcor Floor Doors
  - h) (1) Three Rail Rappelling Railing System, 42" High, Prime Painted Tubes/Pipes
  - i) White Liner Panel on the Interior of All Stud Walls
4. The erection of the Burn Building will be on the same property as a separate ongoing renovation and additions construction project to the Bristol Fire Station Engine #4 Building. Work, deliveries, laydown, and storage areas will need to be coordinated with the Construction Manager of the additions and renovation project.
5. Perform all excavation and backfill associated with this work in strict accordance with drawings, specification, OSHA, Project Safety Program and other applicable requirements. Provide foundation and slab excavation and backfill for a 49' x 22' burn building, based on Fire Facilities sheet 1 of 2 for preliminary foundation design. Note #10 provide 6" of free draining fill under the slab and burn building.
6. Receive, unload, distribute, secure and install all materials furnished by the Prefabricator as indicated within its' specific scope of work and the contract documents. Provide any/ all miscellaneous materials needed for attachment of prefab pieces as noted on shop drawings.
7. Control grading so that ground is pitched to prevent water from running to the excavated areas, damaging other structures, or adjacent properties. Remove water accumulated in excavations by pumping or other means until earthwork operations are complete in order to maintain a stable excavation and undisturbed subgrade at all times. This duration includes the concrete placement phase. Ensure all construction proceeds in-the-dry.
8. Provide smooth, level area free from standing water for any cranes used for erection, including the area required for access and staging in accordance with Subpart R of the 1926.750-761 OSHA Regulations within the building and around the building perimeter as required.

9. Provide all materials, labor, equipment and services required to complete all concrete work in accordance with Fire Facilities preliminary foundation drawings sheet 1 & 2 titled Wesco Model FF-3 Typical. This includes, but is not limited to all cast-in-place concrete work in accordance with the drawings and specifications including, but not limited to: footings, foundation walls, slab on grade, elevated slab infills, pads, piers, pits, etc. Provide all concrete pumping as required to complete this work.
10. The foundation drawings are preliminary, any revisions to the foundations based on the final engineered design will be handled via change or thru the allowances.
11. Provide all formwork required to facilitate concrete placements. Coordinate actual dimensions of opening, embeds, anchor bolts, etc with the shop drawings from the Prefabricator. Ensure that information required from others for layouts, dimensions, and recesses are coordinated as part of the generation of rebar shop drawings.
12. Furnish and install steel anchor bolts in concrete, with nuts and washers and non-shrink grout. Install anchor in such a manner as to allow adjustments after pour. Grout to final location with approved structural material.
13. Provide any lights necessary to perform your work. This includes for slab on grade placement.
14. Provide all lines, grades, layout, field engineering and survey work as required to complete this scope of work. This Trade Contractor is responsible for the accuracy of all lines, elevations and measurements executed under the contract. Verify figures indicated in the approved Prefab shop drawings before laying out this work. Report any perceived inconsistency or error in drawings, or layout to the Owner immediately upon discovery.
15. Provide your own dumpster. Legally dispose off-site all materials abandoned and/or removed under this scope of work. Coordinate the location of your dumpsters with the neighboring construction project. Clean concrete over spray and splatter from all surfaces immediately after placement of concrete associated with this scope of work. Create a concrete wash-out collection area for use by this Trade Contractor's concrete trucks. Remove and dispose of all concrete washout generated. Properly control and contain the wash-out of equipment, including delivery trucks, so as not to allow run-off and contamination of adjoining areas.
16. At the completion of the project, clean the entire building and site of all rubbish, litter, debris, and other extraneous materials.
17. Under no circumstances will heavy equipment (i.e. excavators/concrete trucks) be allowed on areas where under-slab MEP rough work has been completed on the neighboring construction project.
18. Provide all traffic control associated with concrete placement operations and prefab building delivery that are required on-site and off-site to maintain vehicle and pedestrian traffic and coordinate concurrent Trade Contractor access to construction area.
19. Materials testing and lab inspection costs will be by others. Coordinate all required testing and inspections requirements well in advance and notify the Owner accordingly.

20. The following clause is included in the Contract Agreement for this bid package: "The Trade Contractor hereby agrees to defend, indemnify and hold the Construction Manager and the Owner harmless from and against any and all claims which arise out of or result from the Trade Contractor's negligence, errors, acts or omissions in the performance of the design services required under this Agreement."

**END OF SECTION 11 90 01**

**DIVISION 13 - SPECIAL CONSTRUCTION**

**SECTION 131210 - PRE-ENGINEERED STEEL FIRE TRAINING TOWER**

**PART 1 - GENERAL**

**1.1 RELATED DOCUMENTS**

Drawings and general provisions of the contract, including General and Supplementary Conditions and Specification Sections, apply to this Section.

**1.2 SUMMARY**

This Section includes the following:

- Fire Training Tower.
- Design requirements.

**1.3 RELATED SECTIONS**

The following Sections contain requirements that relate to this section:

**1.4 REFERENCES**

**1.4.1 American Iron and Steel Institute (AISI):**

“Specification for the Design of Cold-Formed Steel Structural Members.”

**1.4.2 American Institute of Steel Construction (AISC):**

“Manual of Steel Construction”, Allowable Stress or Load and Resistance Factor Design.

**1.4.3 American Society for Testing and Materials (ASTM) Publications:**

ASTM A-36 “Standard Specification for Carbon Structural Steel”

ASTM A-123 “Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products”

ASTM A-653 “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process”

ASTM A924 “Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process”

**1.4.4 National Fire Protection Association (NFPA):**

NFPA 1402 – “Guide To Building Fire Training Service Centers”

NFPA 1403 – “Standard On Live Fire Training Evolutions”

**1.4.5 Occupational Safety and Health Standards (OSHA):**

29 CFR 1910.23 – “Guarding Floor, Wall Openings, and Holes”

29 CFR 1910.24 – “Fixed Industrial Stairs”

29 CFR 1910.27 – “Fixed Ladders”

## **PART 2-DESCRIPTION**

### **FIRE TRAINING SIMULATOR**

#### **2.1 PURPOSE:**

This structure will be used to provide training for fire fighters and leaders in controlled environments, which replicate actual conditions.

#### **2.2 GENERAL:**

The tower shall utilize a structural steel frame system and curtain wall design. Structural framing systems are considered the norm for high-rise and commercial structures. The curtain wall/exterior wall panel design produces an ideal buffer or protection between the main structural frame of our building and any exterior elements, so that if an exterior wall panel is damaged (i.e., fire truck hits the side of the tower) no structural damage is likely to occur. This wall panel system also creates a flat surface ideal for ladder or rappelling anywhere on the tower to simulate actual street conditions.

#### **2.3 STRUCTURAL INTEGRITY:**

The wind loads, deck and the roof loads stated herein represent the standard criteria. Increased loadings, as may be dictated by local jurisdictions, will be accommodated. The primary structural system shall utilize hot-rolled structural steel column and beam frames sized to meet and exceed the loads as indicated. This training simulator shall be considered a nonbuilding structure for both code compliance and load interpretation. The primary and secondary structural system shall also meet and exceed the loads as indicated while maintaining a maximum deflection of  $L/240$ .

#### **2.4 CODE COMPLIANCE:**

The training simulator's primary structural and seismic design shall be in accordance with the building code having jurisdiction in the area of the project. Due to the nature of the intended use of these training towers, the stair design, the means of egress, fire wall requirements as well as other construction issues, are not expected to satisfy the criteria of buildings intended to accommodate public occupancy. This may require a building code variance in some locations; however, this simulator shall meet all applicable NFPA and OSHA standards. It is the responsibility of the owner to obtain such variance if required.

#### **2.5 MATERIALS:**

All materials shall be new and shall conform to applicable ASTM specifications. All structural or nonstructural materials used, 10 gauge or less in thickness, whether exposed or not to the

elements shall be **hot-dipped galvanized**. When any mention of galvanized is noted within these specifications, it shall be implied to mean hot-dipped galvanized. Any exposed material which is not galvanized, shall be given one coat of shop paint.

## **2.6     FASTENERS:**

All fasteners utilized with galvanized steel panels not exposed to the elements shall be electro-galvanized. All exterior fasteners shall be furnished with a contained EPDM washer under the head for sealing. Structural columns and beams shall be field bolted with (A325) 5/8" diameter electro-galvanized bolts or larger. Anchor bolts shall be furnished by the concrete contractor, unpainted and of the size specified on the anchor bolt plan.

## **2.7     WEATHER SEALING:**

All joints in weather tight areas are to be sealed with tape caulk or foam closures as specified on the building plan. Because of the intended use water tightness of simulators is not required or assured.

## **2.8     ROOF SYSTEMS:**

Roofs shall be decked with 30" or 36" wide, 18 ga. unpainted galvanized 18 gage steel deck per **ASTM A-653, class G60** with recessed fasteners and shall meet the stated design load. Panels must have 6" on center cell spacing with an actual 4 1/4" flats with an actual 1 3/4" wide recesses and a maximum of 1 1/2" deep recesses. Panels must be roll formed.

## **2.9     EXTERIOR WALL SYSTEM:**

Wall panel/curtain wall system shall provide for a concentrated rappelling/ladder load of 890 pounds while the primary structural framing supporting this wall system shall provide for a concentrated point load of 2300 pounds. **Rake trims, parapet rake trims, and window opening sill trim corners shall be beveled to prevent rope chafing, personal injury, or equipment damage.**

## **2.10    WALL PANELS:**

The exterior wall panels shall be essentially flat to allow for safe laddering and rappelling anywhere on the simulator without the requirement of additional exterior surface plates to form a flat surface. The exterior wall panels shall be of 18 ga. hot-dipped galvanized steel per ASTM A-924, class G-90. Panels shall have nominal 4 3/4" flats with a maximum 1 1/8" wide recesses and shall be set in the horizontal plane. Since panels are set in the horizontal plane, sealants are not required to make this structure weather tight (sealants in extreme temperature environments will breakdown prematurely). Panels must be brake formed to provide a maximum 1/8" inside radius. All end joints of all panels must be backed by a splice panel, which extends a minimum

of 12" either side of the joint (24" total). Exterior walls panels shall be painted from the customer's choice of the manufacturer's available colors.

The interior wall panels shall be corrugated for added strength and durability. The interior wall panels consist of hot-dipped galvanized steel per ASTM A-924. The interior wall panels shall have a 3/4" deep maximum corrugation at 3 1/2" on center and shall be set in the vertical plane. Interior wall panels shall be painted white.

Painted wall panels (interior and exterior) shall be manufactured from coil coated steel meeting ASTM A-924, hot-dipped galvanized, and painted with a **paint system on both sides** of the panel. The base coat shall be a 0.2 to 0.25 mil coat of a polyurethane primer. The topcoat shall be a 0.7 to 0.8 mil coat of silicon protected polyester on the face side. The paint, on both sides of the panel, is to be baked on. The finished surfaces are to have a light wax coating applied after painting.

## **2.11 SECONDARY WALL FRAMING:**

Wall framing shall be of conventional steel stud construction. Studs are to run vertically to represent common stud construction and be spaced at no more than 24 inches on center. Stud size and gage shall be determined by the design engineer, and shall accommodate all design criteria stated in other sections of this specification. All rough openings shall be framed in the conventional manner and provide fastening surfaces for all interior and exterior finishes and trims as provided with the building system.

## **2.12 SECONDARY ROOF FRAMING:**

Roof framing shall be of conventional steel joist construction. Joists are to be spaced at no more than 24 inches on center and shall have a maximum span length of 14 ft. All rough openings shall be framed in the conventional manner and provide fastening surfaces for all floor and roof decks as provided with the building system.

## **2.13 WINDOW & DOOR LOCATIONS:**

Window and door locations indicated on the drawings are suggested only. All such openings are to be field cut and with the exception of the stair wall, may be located according to preference.

## **2.14 WINDOW SHUTTERS:**

All window openings shall be provided with a swinging shutter of the proper size for the opening. Framed opening studs/jambs shall be 16 ga. galvanized steel. Shutters for all areas shall be made with double skins of 18 ga. galvanized steel per ASTM A-924. Shutters will be provided as a 1-3/8" thick factory welded hollow metal assembly with a minimum of 3 vertical interior hat channel stiffeners and a 14 ga. hinge reinforcement. The hinges shall be ball-bearing swaged mortise mount, 4" x 4" x 5/32" thick stainless steel, commercial grade, and provided



with the appropriate quantities per shutter (see paragraph below). A hollow metal welded assembly shall be used to prevent premature temperature warping that occurs on single panel/sheet shutters. Galvanized shutters are required to prevent premature rusting. All shutters shall be provided with a galvanized hold open latch.

Shutters for all areas except the burn room shall have two heavy-duty hinges. Shutters for the burn room areas shall have three heavy-duty hinges. In addition, burn room shutters shall be protected with a 1" thick Westemp insulation panel mounted on the inside of the burn room.

## **2.15 DOORS:**

Doors for all areas except for burn areas shall be double skins of 18 ga. galvanized steel (total thickness), per ASTM A-924, and shall be an insulated hollow metal swing doors with 3 stainless steel ball-bearing hinges and full weather stripping. Framed opening studs/jambs shall be 16 ga. galvanized steel. This 1 3/4" thick door shall have a baked-on enamel finish and will include a lockset. Locksets shall meet ANSI A156.2 Series 4000 Grade 2 certifications and shall be keyed alike. Doors on 1<sup>st</sup> floor mounted at top of curb shall include a door sweep to allow for hose advancement even when door is closed to exterior of tower.

Doors for the burn areas shall be made with double skins of 18 ga. galvanized steel per ASTM A-924 with four heavy-duty hinges. The hinges shall be ball-bearing swaged mortise mount, 4" x 4" x 5/32" thick stainless steel, commercial grade. Doors will be provided as a 1-3/8" thick factory welded hollow metal assembly with a minimum of 3 vertical interior hat channel stiffeners and a 14 ga. hinge reinforcement. A hollow metal welded assembly shall be used to prevent premature temperature warping that occurs on single sheet doors. Galvanized doors are required to prevent premature rusting. Framed opening studs/jambs shall be 16 ga. galvanized steel. Doors shall be provided with a galvanized hold open latch, a 6 1/2" door pull, and an adjustable spring closure. Door sweep is to be provided to allow hose advancement even when door is closed to exterior of burn room. In addition, burn room doors shall be protected with 1" thick Westemp insulation panels mounted on the inside of the burn room.

## **2.16 PARAPET WALLS:**

Parapet walls, if utilized, shall be designed to resist a load of 50 lb/ft and a concentrated point load of 200 lbs in any direction at the top. This wall shall incorporate a minimum of 12 ga. galvanized studs at one foot on center with 18 gage wall panels installed on both sides. The parapet shall incorporate an integral draining system that provides for uniform drainage without the need for a concrete roof covering.

## **2.17 SECONDARY FLOOR SYSTEM:**

Interior decks shall be of six inch wide, unpainted 18 ga. **slip resistant galvannealed** steel per **ASTM A-924, A-60** with recessed fasteners and shall meet the stated design load. Panels must have nominal 5" flats with a maximum 1" wide by 1" deep recesses (maximum 1" recess is

required to prevent potential injuries). Panels must be brake formed at 90 degrees and provide inside radiuses no greater than 1/8". All floor and roof decks shall be framed with light gage steel "C" joists spaced at no more than 24 inches on center and shall have a maximum span length of 14 ft. Joists size and gage shall be determined by the design engineer, and shall accommodate all design criteria stated in other sections of this specification. Concrete floor covering shall be specified for the entire floor system. Concrete floor covering is by others.

The concrete shall be a minimum of 1 1/2" thick and shall be fiber reinforced. The concrete shall be pitched toward exterior walls and doors. Even with concrete covering, the steel floor panels, located below, shall alone be designed to carry all of the required loads and shall still be a minimum of 18 ga. thick galv. steel. Concrete is prone to damage in high temperature burn areas and in unheated structures due to freeze/thaw conditions, therefore concrete cannot be used to increase the design strength of the steel floor panels/decks in fire training structures.

## **2.18 STAIRS AND ACCESSORIES:**

**2.18.1** Stair widths shall be 3'-8" wide and shall include handrails and guardrails. Stringers shall be plate, treads and platforms of bar grate risers to be open. Bar grate treads (19W4 x 1" deep) are to be factory attached to the stringers and shall include a diamond plate nosing. Stairs shall be designed to resist a minimum loading of 100 psf and a minimum concentrated load of 300 lbs at the center of any treadspan.

**2.18.2** Handrails and guardrails shall consist of schedule 40 - 1 1/4" i.d. (1.66" o.d.) round pipe and the openings between rails shall not exceed 12" (minimum of three horizontal rails required). Handrails and guardrails shall be designed to resist a concentrated point load of 200 lbs in any direction at the top. Handrails shall be an all factory welded assembly. Guardrails shall have a factory welded post assembly to allow for the attachment of horizontal rails and shall be a minimum of 42" high. Rail extensions are not to be utilized.

**2.18.3** Stairs, stringers, handrails, guardrails, bar grating, ladders, and platform frames shall be hot-dipped galvanized per ASTM A-123. All welds, holes, cutting, and bending must be made prior to hot-dip galvanizing.

## **2.19 FF-3/DEPUTY CHIEF FEATURES:**

### **2.19.1 TOWER SECTION**

12'-0" x 22'-0" x 30'-0"

Flat roof

Wind Load 110 MPH

Roof live load 100 PSF

Floor live load 100 PSF

4' x 4' roof chop-out curb, 12 ga. galvanized (see drawings for Qty.)

3' x 4' window openings with steel shutters (see drawings for Qty.)  
3' x 7' metal door (see drawings for Qty.)  
Interior stairs to the third deck level  
Parapet roof guard with exclusive roof drainage to the exterior of the building with chained openings

### **2.19.2 RESIDENTIAL SECTION**

22'-8" x 22'-0" x 27'-3" ridge  
16 degree double pitched, gabled roof  
Wind load 1000 MPH  
Roof live load 100 PSF  
Deck live loads 100 PSF (including attic area)  
11'-8" x 12'-0" Second Floor Burn Room with Westec Insulation System  
Attic drywall frame  
Roof ladder fender brackets (see drawings for Qty.)  
3' x 4' window openings with steel shutters (see drawings for Qty.)  
6' x 4' window opening with steel shutters (see drawings for Qty.)  
3' x 7' exterior steel door (see drawings for Qty.)  
6' x 7' exterior double leaf steel door (see drawings for Qty.)  
3' x 7' interior steel door (see drawings for Qty.)  
3' x 3' hinged gable louvered shutters (see drawings for Qty.)  
4' x 4' roof chop-out curbs, 12 ga. galvanized (see drawings for Qty.)

### **2.19.3 BURN ROOM (ANNEX)**

14'-0" x 22'-0" x 9'-10" High  
½" in 12" single pitch roof  
Wind load 110 MPH  
Roof live load 100 PSF  
3' x 4' window openings with steel shutters (see drawings for Qty.)  
3' x 7' exterior metal door (see drawings for Qty.)  
3' x 7' interior metal doors (see drawings for Qty.)  
Westec insulation system & temperature monitoring system.

## **2.20 ADDITIONAL FEATURES TO BE INCLUDED:**

### **Fire Escape**

Exterior fire escape to the second deck (10' high). Stair widths shall be 3'-0" wide and hot-dipped galvanized. Constructed of formed stringers welded to bar grate treads with open risers. Hand rails to be manufactured from 1.25" I.D. (1.66" O.D.) schedule 40 round pipe and hot-dipped galvanized. To include swing doors at each upper floor.

### **Ships Ladder**

Provide a ship ladder that extends from the 3rd floor to the roof deck. The ships ladder shall be constructed from heavy gage steel stringers and welded steel bar grate treads and open risers. The ladder shall have hand rails on both sides and shall be provided hot-dipped galvanized.

### **Forged Swivel Rappelling Anchor**

(8) Rappelling anchors and their attachment to the structure shall be rated for a working load limit of 5000 lbs (OSHA load compliant per 29 CFR 1926.502(d)(15)). The anchor housing shall be galvanized aircraft quality alloy and capable of a 360 degree swivel and 180 degree pivot. Each anchor shall be 200% proof-load tested.

### **Roof Hatch 2'-6" x 4'-6"**

Provide (1) Bilco 2'-6" x 4'-6" roof hatch in the tower roof. The hatch shall be equipped with compression spring operators, positive latching mechanism, automatic hold open arm, and shall be galvanized steel with prime paint covering.

### **Roll-up Door**

The roll-up door shall consist of a continuously corrugated galvanized steel curtain with a siliconized polyester finish. The door shall slide on guides onto a top drum through the means of a torsion spring. This door aids in the simulation of commercial training exercises though a larger access door.

### **Bilco Floor Door 3'-0" x 3'-0"**

Provide a Bilco 3'-0" x 3'-0" floor door in the 2nd and 3rd floors. The door shall be rated for 300 psf live load with a 1/4" thick diamond plate cover. It shall be hot-dipped galvanized and equipped with both a compression spring lifting mechanism and a hold open arm. – (2) total floor door(s) provided.

### **Rappel Railing System**

Three rail rappelling railing system (prime painted) is 42" high and consists of (3) 3" diameter pipes (schedule 80) set horizontally at 12" on center. This system allows the rope to run from the rappelling ring tie off point, at the deck, overtop to the trainee. It is used to aid trainees in rappelling exercises by raising the rope up off of the roof deck to help with the initial roof edge situation. – (1) rappelling railing system(s) required

## **2.21 NOT USED**

## **2.22 STAINLESS STEEL BURN ROOM INSULATING SYSTEM:**

Two-inch thick insulating blankets with a protective skin of stainless steel face panels are to be provided for the interior walls and ceiling for the burn areas (precut to length - field cut at door and window openings). The doors and window shutters shall be protected with a minimum of one-inch thick burn room insulating panels (precut to fit).

The insulating blankets shall be rated for 2300 degrees F. and shall be unaffected by the application of water. The insulation blankets shall not crack or break, shall be free from asbestos, and shall not produce toxic byproducts in the course of the intended use. The two-inch thick insulation blankets shall have a maximum K value of 0.74 at 1200 degrees F and 0.48 at 800 degrees F (please note – smaller K values denote better insulating values of the system).

The face panels shall have a 3/4" maximum corrugation at 3 1/2" on center to allow for lateral expansion when exposed to high temperatures. The base material, of the face panels, shall consist of type 304 stainless steel for corrosion protection and thermal performance at high temperatures. These panels shall attach to thermally protected channels with stainless steel screws. Stainless steel trims (type 304) shall protect all wall and door/shutter opening corners. All face screws exposed to fire shall be stainless steel and these screws shall not protrude through the backside of the insulating blanket (through screws are not permitted for maximum thermal protection).

The stainless steel face panels shall not be restrained from expanding at high temperatures, but rather the integral system shall be designed to accommodate the panel movements without creating any buckling or warping of the panels. All panels and trims shall be screw attached to allow for easy maintenance or inspection without disrupting the systems ability to move; welded panels are not allowed. Trims are to be designed to accommodate thermal expansion either through the use of slip connections or planned deformations.

Doors and window shutter insulation panels shall be pretreated water resistant, free from asbestos and shall not produce toxic byproducts in the course of the intended use. Insulation panels shall withstand a constant temperature of 1200 degrees F. and shall be unaffected by the application of water.

#### Temperature Summary

1. Maximum safe training temperature for life safety is 1200 degrees F (continuous)
2. Maximum service temperature for the insulation panels (doors and window shutters) is 1200 degrees F (continuous)
3. Maximum service temperature of the wall and ceiling insulating system is 1850 degrees F (continuous)
4. Maximum insulating blanket service temperature is 2300 degrees F (continuous)

### **2.23 INTEGRATED TEMPERATURE MONITORING SYSTEM:**

Three temperature sensing devices/thermocouples are to be provided for the interior of each burn room. The thermocouples shall be isolated and consist of fiberglass insulated wiring with sealed stainless steel probes. The fiberglass insulated wires shall be further protected by a stainless steel overbraid for increased durability and protection. Ceiling thermocouples shall protrude into the area perpendicular to the ceiling while all stainless steel encased wall thermocouples shall only run parallel to the walls for safety concerns.

Temperature monitoring shall be sustained with a multiple input, LCD display pyrometer. The pyrometer shall be connected to thermocouples, which are located within the burn areas for temperature reading, and mounted in a lockable NEMA 3R weatherproof box. This pyrometer shall display all attached thermocouple temperatures simultaneously, continually display the maximum peak temperature, have touch sensitive buttons, include a backlight, and have an onscreen programming menu. The pyrometer shall have an internal audio alarm along with the ability to connect external devices (i.e., external audio and visual alarms). Temperature limits shall be user programmable to enable alarms. The pyrometer shall also be capable of data logging which shall include: 72 hour training memory with time and date stamp, onscreen viewing of data, download capabilities of data via infrared interfacing to handheld module. This handheld data acquisition module's data can then be brought to an offsite Windows based computer for download via the SD/SDHC data storage card provided.

## **2.24 DESIGN, DRAWINGS & DATA:**

The supplier shall be responsible for providing the design exclusive of the foundation. Shall submit, as requested, structural calculations for review. Will, within 15 working days after the receipt of order, submit 2 sets of drawings detailing anchor bolt loadings and locations as well as general plans and elevations. Will submit 2 sets of assembly (steel erection) drawings and 2 sets of assembly manuals concurrent with the shipment of materials. Building parts shall each be identified by individual part numbers clearly written on or attached to the part. Part numbers shall coincide with the drawings.

## **2.25 DELIVERY, INSPECTION & STORAGE:**

All components and accessories shall arrive via flatbed trailer. Materials for the burn room may arrive separately via common carrier. Inventory of delivered materials must be taken during delivery or shortly thereafter. Damage to, or shortages noted during delivery must be noted on the freight bill and reported at once to the manufacturer. All claims for damages or shortages must be reported within 48 hours of delivery. Security and materials protection in storage is the responsibility of the receiving party. Materials packaged in small cartons must be stored in a secured area to prevent theft and/or damage by the elements. Materials stored outside must be stacked on pallets and covered with suitable waterproof coverings (not plastic).

## **2.26 WARRANTY:**

### **2.26.1 General Warranty**

The tower supplier shall certify that the training tower and its components have been designed to meet the contract specifications. The tower supplier shall warrant the materials and components to be free of fabricating defects for a period of **one year** from the date of shipment. This warranty is limited to the replacement of defective parts, or at the tower supplier's option, authorization may be given to the PURCHASER to charge back to the supplier an agreed upon amount for extra fieldwork. The supplier will not

ship replacement parts nor authorize extra work to any party other than the ORIGINAL PURCHASER. Any pre-engineered structure will require the erector to furnish a certain amount of field fabrication and / or modifications as stated in the manufacturer's handbook. Sections of work requiring field cutting or drilling are indicated on the drawings or in the assembly manual. Other field modifications may be necessitated by site conditions beyond the manufacturer's control. The foregoing are not subject to warranty.

#### **2.26.2 Burn Room Insulation Warranty**

The burn room wall and ceiling insulation system shall be covered by a **15 year** limited warranty that provides coverage against a break in the thermal barrier caused by cracking, breaking, and spalling. This warranty is to apply to products under normal use and recommended service temperatures - but shall also include damage that has been caused by thermal expansion, thermal contraction, impact load, and thermal shock. This warranty is to be limited to component replacement or repair of defective components at the manufacturer's option. The replacement cost of the materials shall not be prorated over the warranty period itself (i.e., the supplier shall bear 100% of the material replacement cost for the duration of the warranty).

#### **2.26.3 Paint Warranty**

The paint system shall provide a 30/25 year limited warranty on paint finish, which includes chalking and breakdown of film integrity.

#### **2.26.4 Structure Warranty**

A 5-year limited warranty shall be provided on the structure itself.

### **2.27 SUBMITTALS:**

**2.27.1 GENERAL:** Submit the following in accordance with the Conditions of the Contract and Division 1 Specification Sections:

**2.27.1.1 PRODUCT DATA**, floor plans, elevations, catalog, general specifications, locations of similar projects completed.

**2.27.1.2 SAMPLES** of the manufacturer's standard color charts covering both the siding colors and the door and window trim colors shall be furnished to the owner.

## **2.27.2 QUALITY ASSURANCE:**

### **2.27.2.1 MANUFACTURER QUALIFICATIONS:**

The manufacturer shall have a minimum of 10 years successful experience in designing and manufacturing Fire Training Towers of similar size and scope as project requires.

### **2.27.2.2 ENGINEERING PROFESSIONAL QUALIFICATIONS:**

The engineering professional who designs the structure for the project must be registered in the State of the fire training tower's location and have successfully designed a minimum of 10 fire training towers. Upon request, the engineering professional shall submit an Engineering Qualifications Form stating his licensing number in the state of licensure, as well as listing a minimum of 10 fire training towers that he has designed and stamped.

### **2.27.2.3 ERECTOR QUALIFICATIONS:** The erector shall provide evidence of successfully completing two Fire Training Towers of similar size and scope or shall be a certified Fire Facilities erector, as project requires.

## **2.28 SUPPLIERS/SYSTEMS:**

**2.28.1 Provider of Structure:** Fire Facilities, Inc.<sup>®</sup>, 314 Wilburn Road, Sun Prairie, WI, 53590, Phone: 800/929-3726 or 608/327-4100, Fax: 866/639-7012 or 608/834-1843, E-mail: [info@firefacilities.com](mailto:info@firefacilities.com), Website: [www.firefacilities.com](http://www.firefacilities.com)

## **PART 3-EXECUTION**

### **3.1 GENERAL**

Comply with the manufacturers recommendations for preparation and storage of the tower components.

### **3.2 EXAMINATION**

Verify that concrete work has cured a minimum of 14 days. Verify that anchor bolts are at the proper spacing and protrude the proper amount above the concrete. Report any variances to the owner's representative prior to proceeding with erection.

### **3.3 ERECTION**

Follow the details supplied by the manufacturer. Report any discrepancies to the manufacturer prior to proceeding.



### **3.4 FIELD QUALITY CONTROL**

#### **3.4.1 DEFECTIVE WORK**

Materials, components and assemblies not complying with the manufacturer's installation recommendations shall be repaired or replaced, at the option of the manufacturer.

#### **3.4.2 INSPECTION**

Verify that all bolted connections are tight, self-drilling screws with integral washers are seated snugly without washer distortion and rivets have not pulled through the attached materials. Replace improperly set or damaged fasteners.

Inspect all panels, trims and accessories for proper installation and fit. Replace any item which is damaged, warped or distorted. Insure that all field mitered corners fit tightly and smoothly.

#### **3.4.3 ADJUSTING**

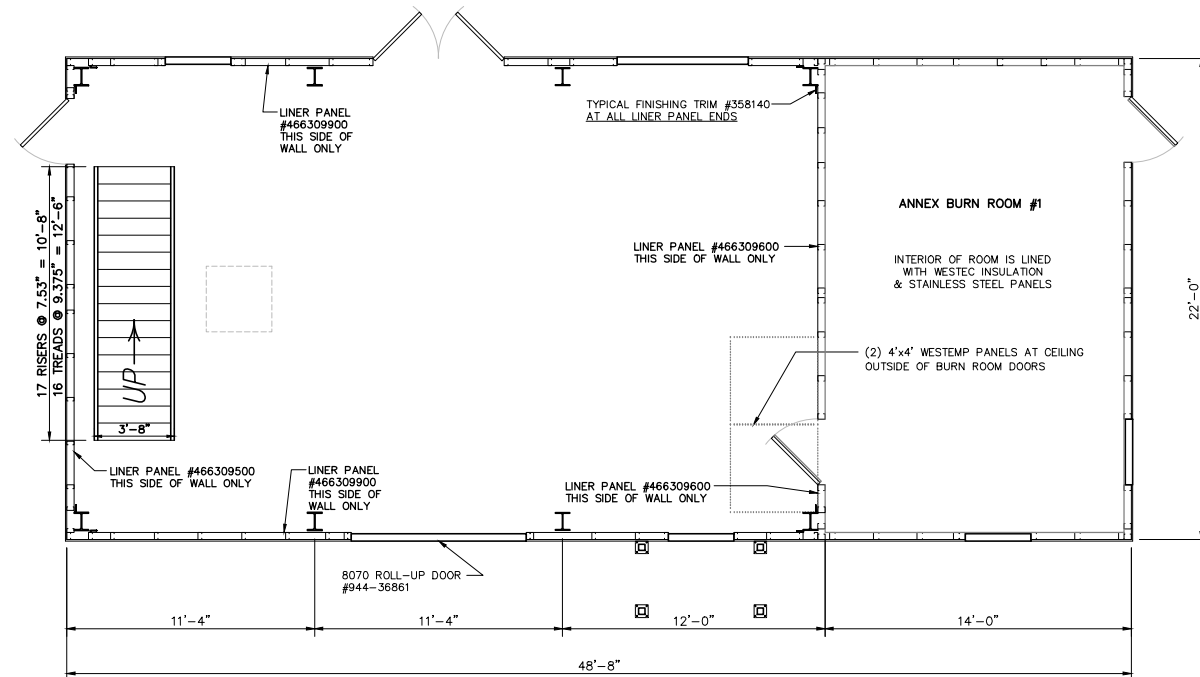
Adjust all shutters, swing doors and hatches so that they swing smoothly without binding and so that the appropriate hardware latches without forcing or slamming. Insure that all closures are adjusted so that they close smoothly.

Check all electrical and mechanical devices to make sure that they are working properly. Temperature monitoring systems must be checked to see that each thermal-couple works accurately. Fans must be tested and demonstrated as working at all speeds.

#### **3.4.4 CLEAN-UP**

At the end of each day check the site and pick all debris and garbage. Insure that all materials are secured in a neat and orderly fashion.

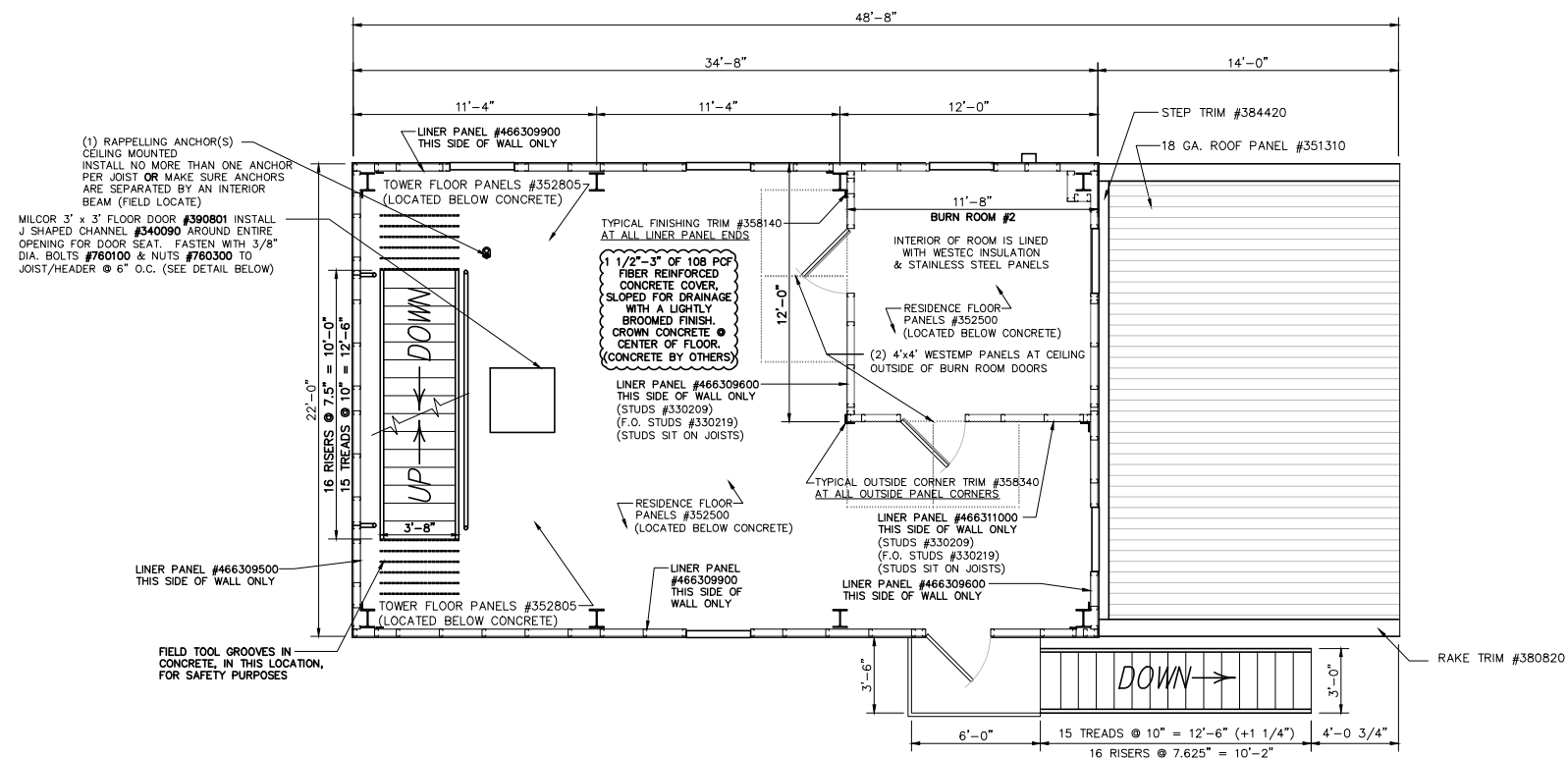
Thoroughly clean the tower inside and out at the completion of the erection process to remove all debris, garbage, packing materials, metal shavings and dirt.



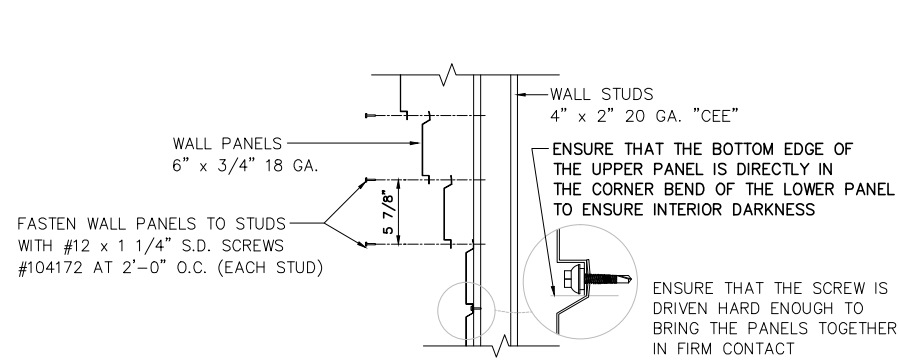
**FIRST FLOOR PLAN**

SCALE:  $1/4" = 1'-0"$

NOTE: ALL SHUTTERS IN TOWER SWING IN, UNLESS OTHERWISE SHOWN  
ALL SHUTTERS IN BURN ROOM & ATTIC SWING OUT, UNLESS OTHERWISE SHOWN

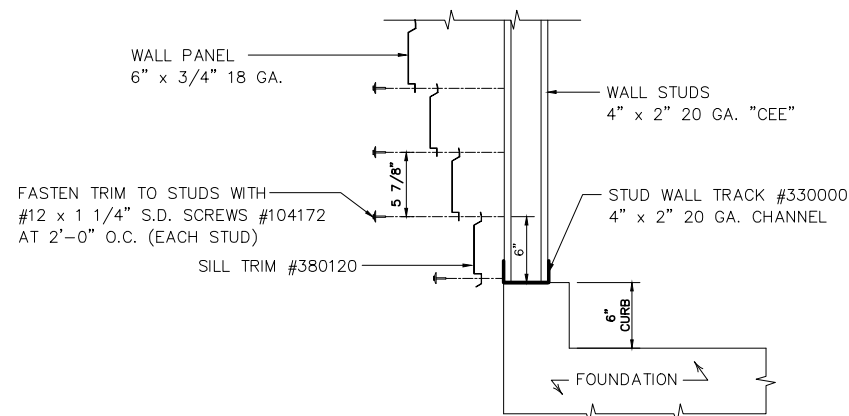






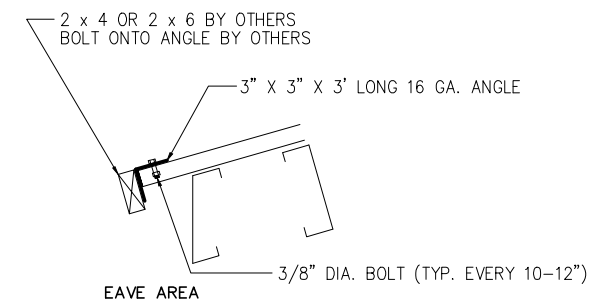
**TYPICAL WALL PANEL FASTENING DETAIL**

scale: 1 1/2" = 1'-0"



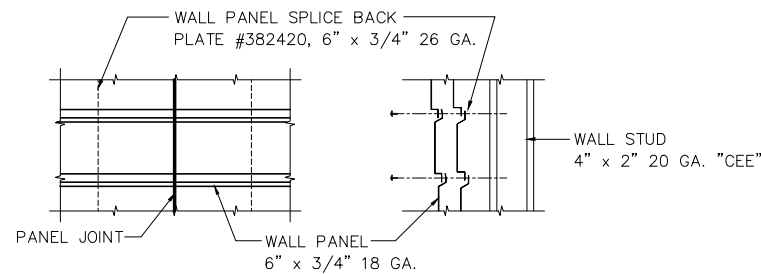
**TYPICAL SILL DETAIL**

scale: 1 1/2" = 1'-0"



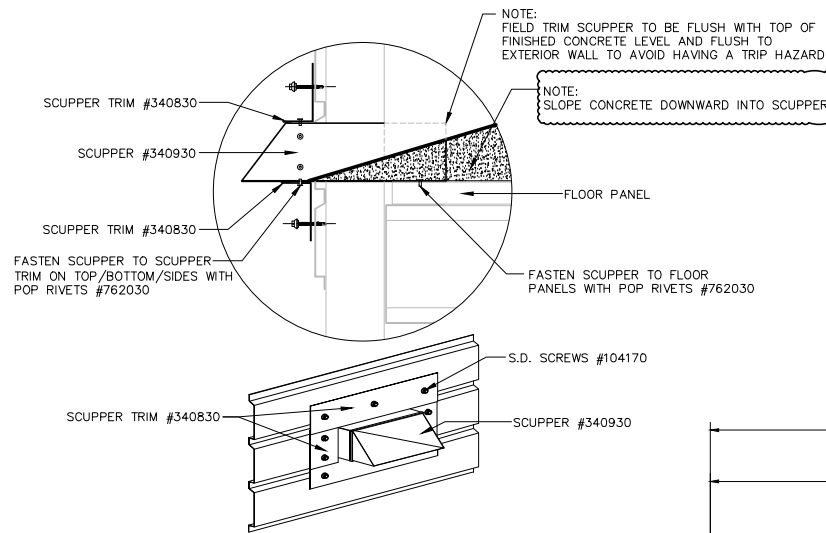
**BRACKETS FOR 2X4 FENDER DETAILS**

scale: 1 1/2" = 1'-0"

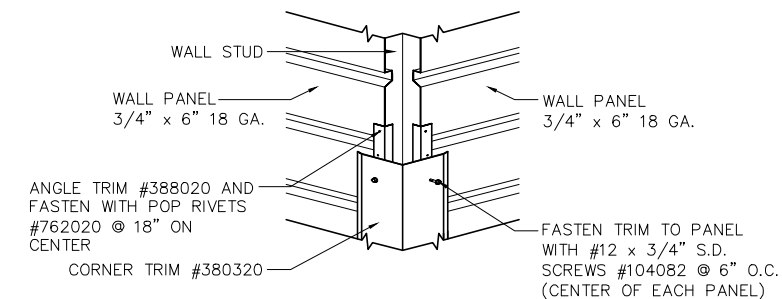


**WALL PANEL SPLICE PLATE**

scale: 1 1/2" = 1'-0"

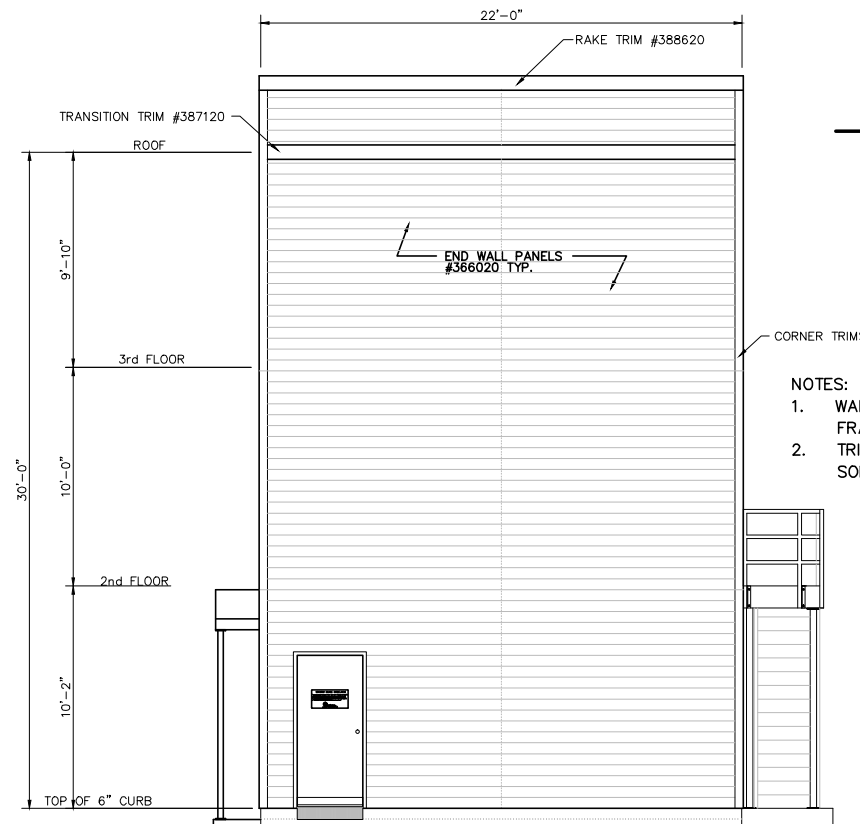


**SCUPPER DETAIL**



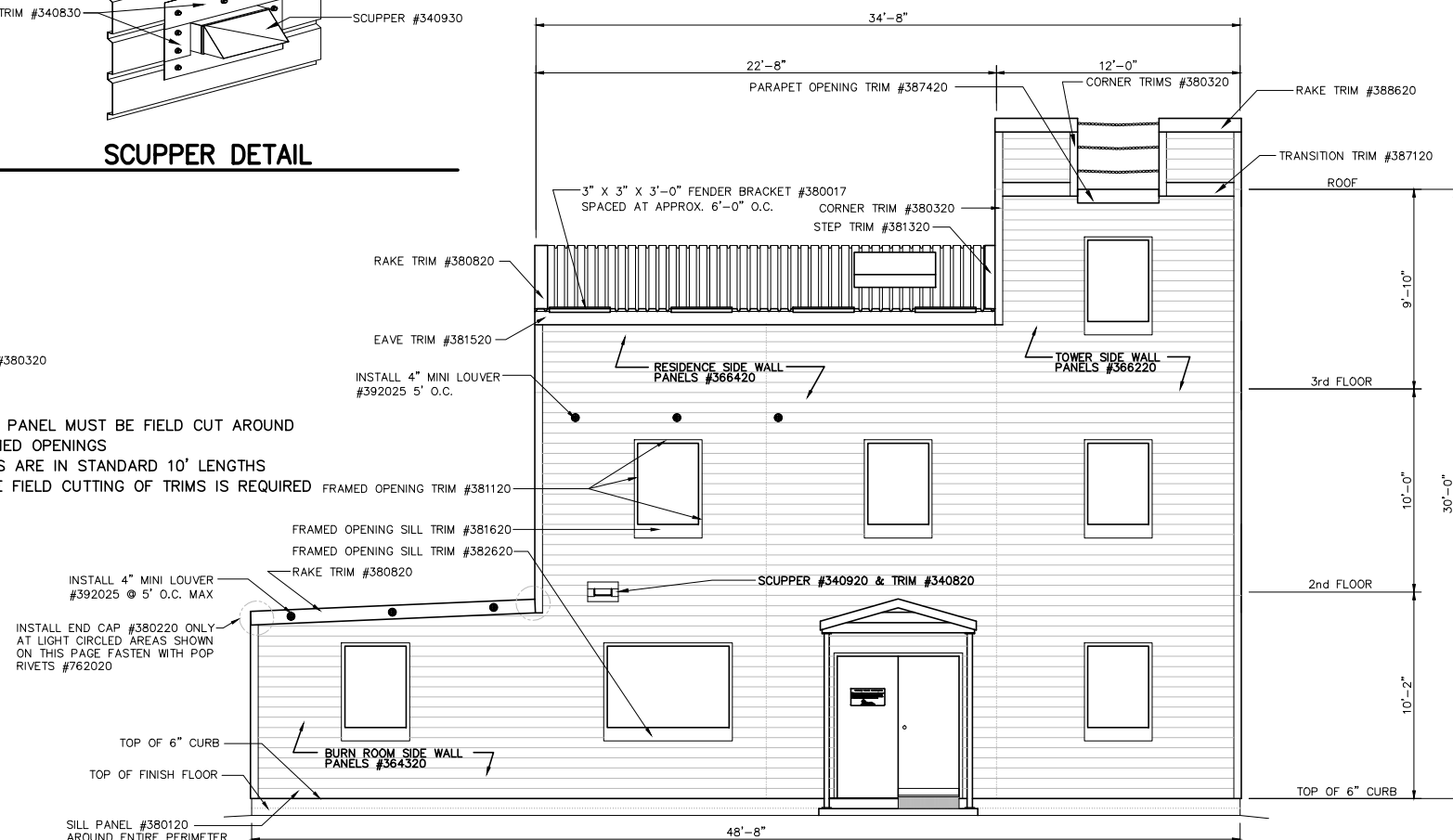
**TYPICAL EXTERIOR CORNER TRIM DETAIL**

scale: 1 1/2" = 1'-0"



**WEST END ELEVATION**

SCALE: 1/4" = 1'-0"



**NORTH SIDE ELEVATION**

SCALE: 1/4" = 1'-0"

REVISIONS	by
1. 9/10/15: REVISED	DWK
2. 9/11/15: REVISED	SPW

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**FIRE FACILITIES**  
STEEL FIRE TRAINING TOWERS



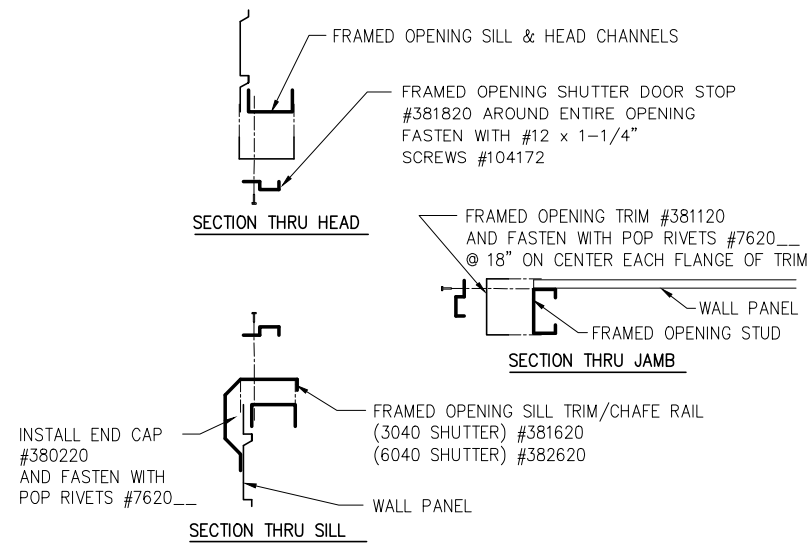
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**WESCO MODEL FF-3**  
CUSTOM  
BRISTOL, CT

Job Description:

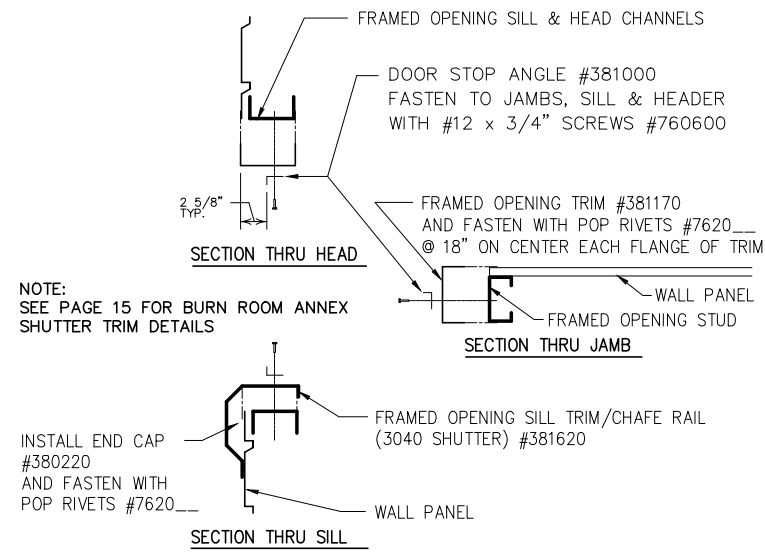
Sheet Title:

Date: SEPT. 2, 2015  
Drawn by: DWK  
Checked by: SPW  
Scale: SHOWN  
Order No. #4786  
Sheet No.



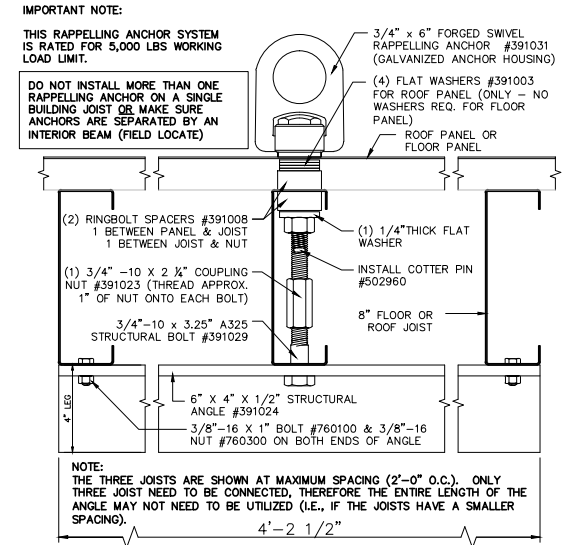
### TOWER SHUTTER TRIM DETAILS

scale: 1 1/2" = 1'-0"



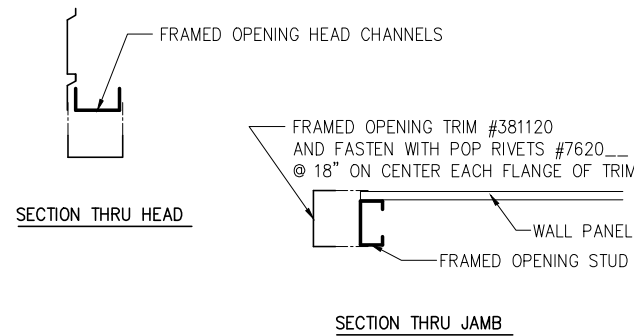
### TOWER/RES. BURN ROOM SHUTTER TRIM DETAILS

scale: 1 1/2" = 1'-0"

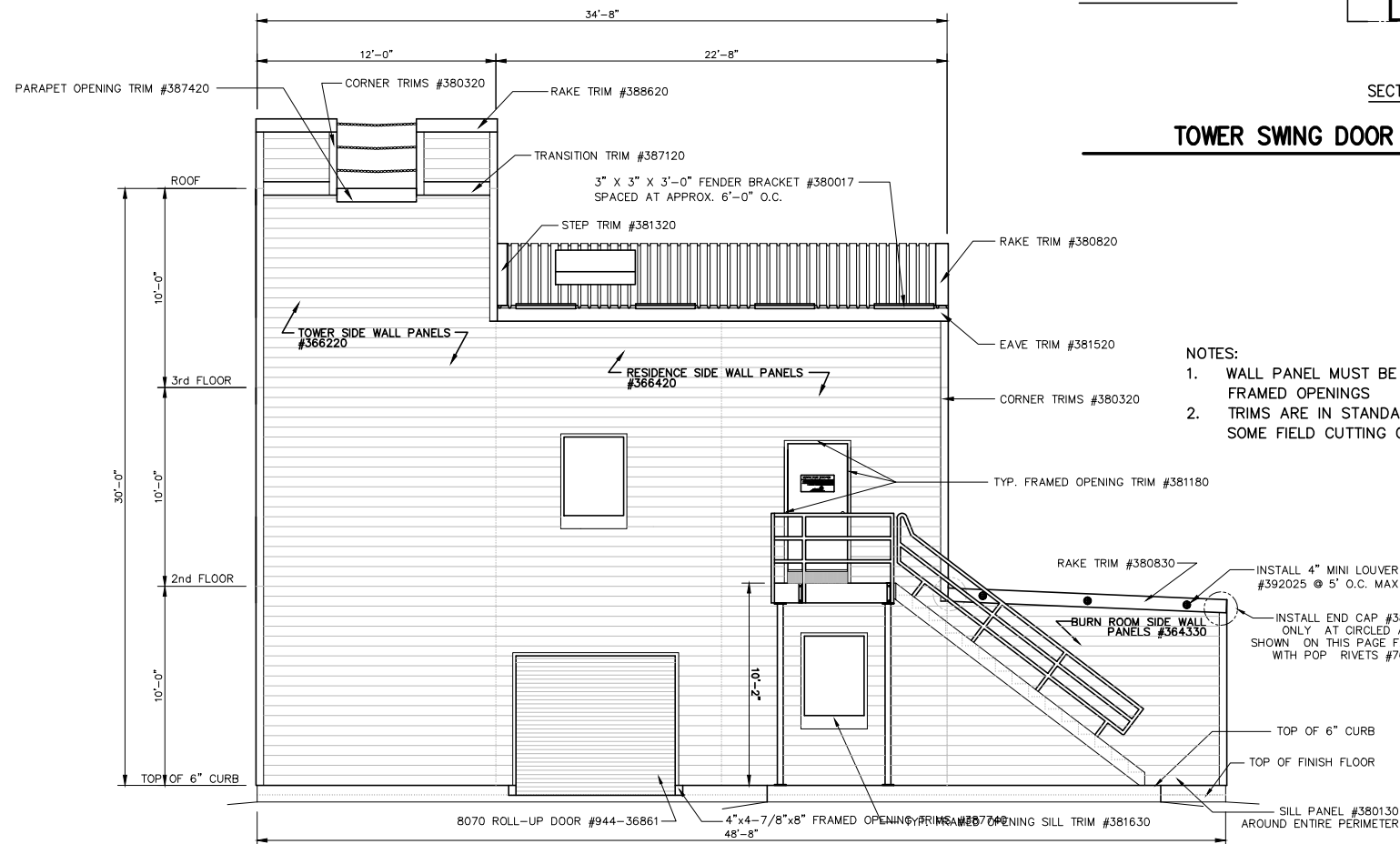


### FORGED SWIVEL RAPPELLING ANCHOR INSTALLATION DETAIL

scale: 3" = 1'-0"

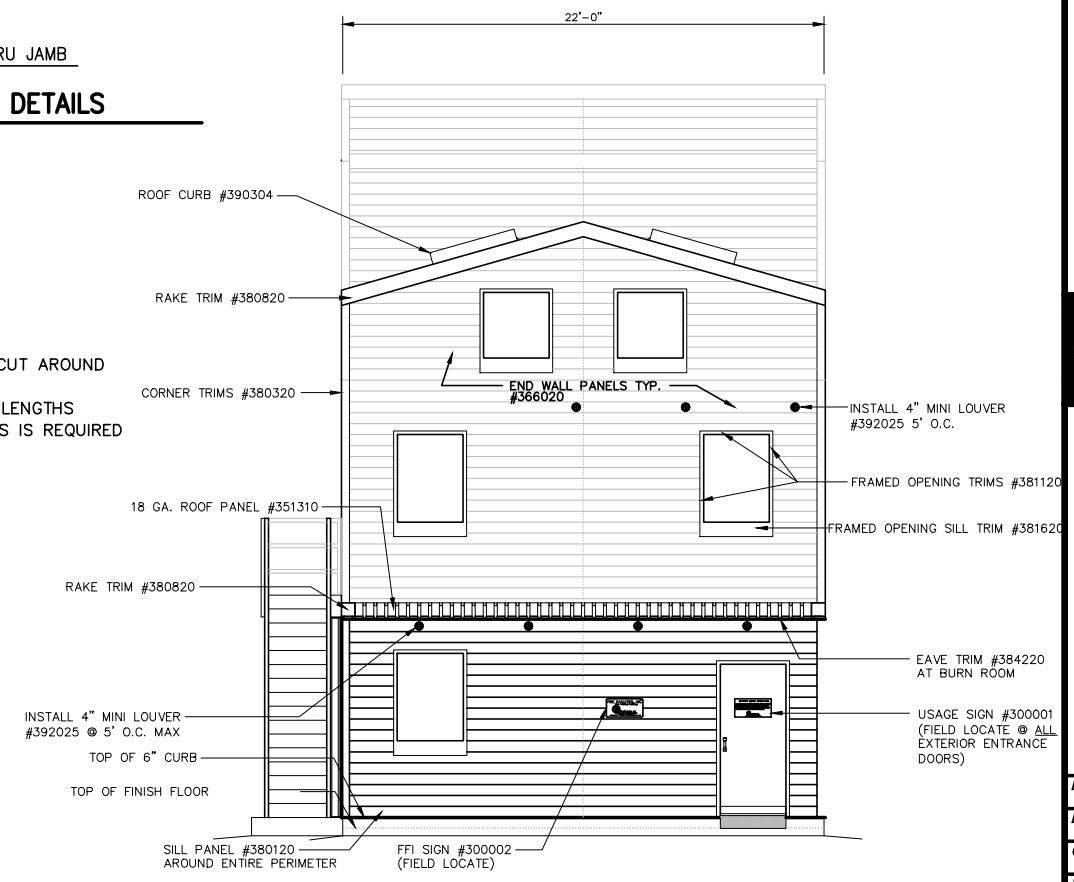


### TOWER SWING DOOR TRIM DETAILS



### SOUTH SIDE ELEVATION

SCALE: 1/4" = 1'-0"



### EAST END ELEVATION

SCALE: 1/4" = 1'-0"

REVISIONS	by
1. 9/10/15: REVISED	DWK
2. 9/11/15: REVISED	SPW

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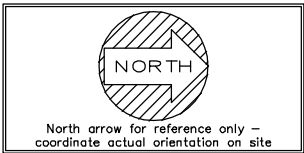
WESCO MODEL FF-3  
CUSTOM  
BRISTOL, CT

Job Description: ELEVATIONS  
Date: SEPT. 2, 2015  
Drawn by: DWK  
Checked by: SPW  
Scale: SHOWN  
Order No. #4786  
Sheet No.

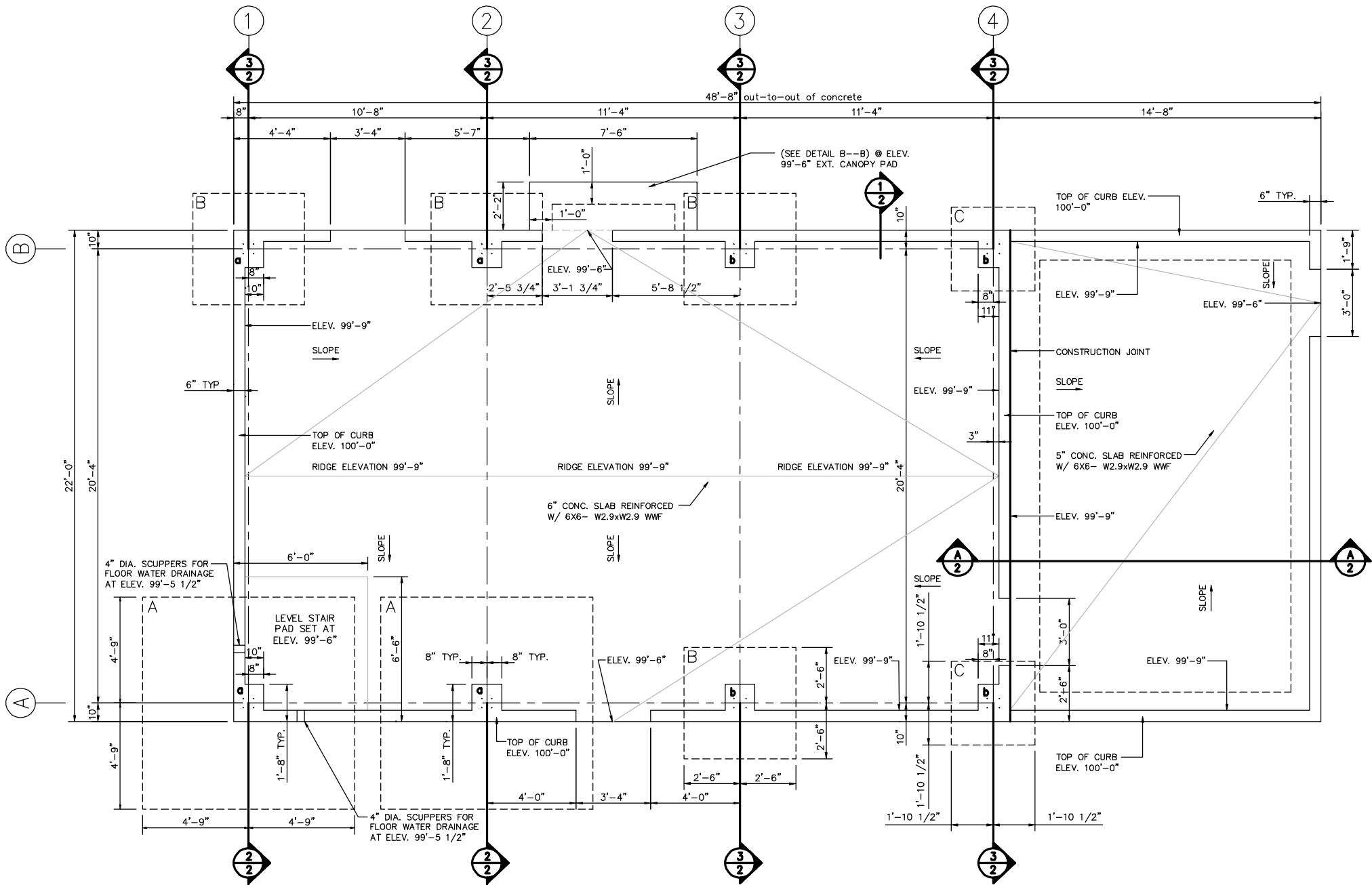
- CONCRETE & REINFORCING STEEL SPECIFICATIONS
1. SCHEDULE OF CONCRETE MIX REQUIREMENTS:
- | USE           | 28 DAY STRENGTH | SLUMP (INCH) | MAX AGGREGATE (INCH) |
|---------------|-----------------|--------------|----------------------|
| FLOOR SLABS   | 3000 PSI        | 3"           | 3/4"                 |
| WALLS & PIERS | 3000 PSI        | 5"           | 3/4"                 |
| FOOTINGS/MATS | 3000 PSI        | 5"           | 1 1/2"               |
2. CONCRETE EXPOSED TO WEATHER (OUTSIDE SLABS, FLOOR SLABS, CURBS, ETC.) SHALL CONTAIN 4 TO 7 PERCENT AIR BY VOLUME.
3. FREE DRAINING FILL SHALL CONFORM TO ASTM D422.
4. CONCRETE SHALL CONFORM TO ASTM C150, TYPE II.
5. AGGREGATE SHALL CONFORM TO ASTM C-33.
6. REINFORCING STEEL SHALL CONFORM TO ASTM A615--GRADE 60.
7. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
8. LAP ALL HORIZONTAL REINFORCING #6 AND GREATER 6'-0" AT SIDE LAPS AND 1'-4" (HOOK) AT CORNERS, MIN. LAP ALL HORIZONTAL REINFORCING #5 AND LESS 2'-6" AT SIDE LAPS AND 1'-0" (HOOK) AT CORNERS, MIN. LAP ALL WELDED WIRE FABRIC 8" AT SIDE AND END LAPS.
9. SITE SHALL BE PREPARED AS RECOMMENDED IN SOIL REPORT PREPARED BY SHANNON & WILSON, INC. OF RICHLAND, WA ON MAY 11, 2004. FOUNDATION IS DESIGNED FOR A SOIL BEARING OF 3,000 PSF. PLEASE NOTIFY PROFESSIONAL IN CHARGE OF THE SOIL REPORT OF ANY UNUSUAL SOIL CONDITIONS.
10. COMPACT FILL UNDER FLOOR SLABS 95% TO DENSITY PLACE 6 INCHES OF FREE DRAINING FILL UNDER ALL SLABS. REMOVE ALL MATERIAL UNDER THE FOOTINGS THAT DO NOT COMPLY WITH A SOIL BEARING PRESSURE OF 3,000 PSF. REPLACE THIS MATERIAL WITH ENGINEERED FILL UNDER ALL FOOTINGS (95% COMPACTION) IN 8" MAXIMUM LIFTS.
11. PLACE CONSTRUCTION JOINTS AT 15'-0" O.C. MAXIMUM IN EACH DIRECTION FOR ALL FLOOR SLABS
12. FIBERMESH SHOULD BE INCORPORATED IN ALL CONCRETE FLOOR SLABS TO MINIMIZE THERMAL CRACKING.

FOOTING SCHEDULE						
MARK	SIZE	TOP STEEL		BOTTOM STEEL		PIER DOWELS
		LONGITUDINAL	TRANSVERSE	LONGITUDINAL	TRANSVERSE	
A	9'-6" X 9'-6" X 2'-0"	10 - #6'S	10 - #6'S	10 - #6'S	10 - #6'S	4 - #6'S
B	5'-0" X 5'-0" X 1'-6"	6 - #5'S	6 - #5'S	6 - #5'S	6 - #5'S	4 - #6'S
C	3'-9" X 3'-9" X 1'-6"	4 - #5'S	4 - #5'S	4 - #5'S	4 - #5'S	4 - #6'S

- NOTES:
1. TOP OF CURB ELEVATION IS 100'-0".  
TOP ELEVATION OF ALL FOOTINGS IS 97'-6".
2. COORDINATE PLAN ELEVATIONS WITH SITE ELEVATIONS.



PRELIMINARY DRAWING  
ESTIMATING ONLY



FOUNDATION PLAN

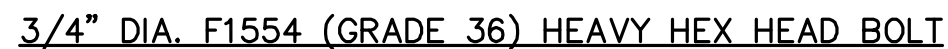
SCALE: 3/8" = 1'-0"

REVISIONS	by

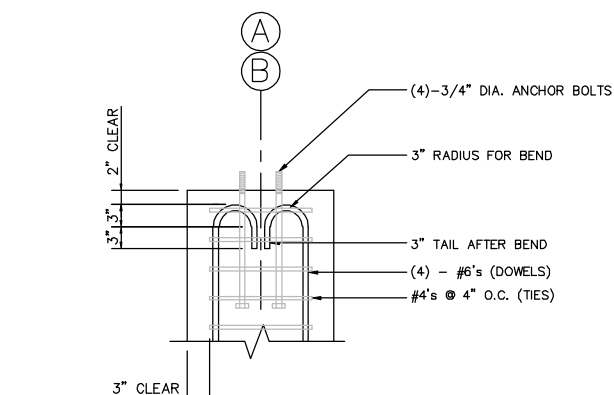
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Lab Description	WESCO MODEL FF-3 TYPICAL
	FOUNDATION DESIGN
Doc	102010
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Checked by	
Scale	SHOWN
Order No.	
Sheet No.	



### 1. TYPICAL WALL SECTION



DOWEL DETAIL FOR J HOOK

BOLT SECTION PATTERN

2'-0"

2'-6"

3" CLEAR

1'-6"

3" CLEAR

2 1/2"

2"

(A)

ELEV. 100'-0"

SEE DOWEL DETAIL FOR J HOOK

#4's @ 4" O.C. (TIES)

(4)-#6 DOWELS W/ 12" HOOK

SEE FOOTING SCHEDULE

SECTION THROUGH PIER

CONSTR. JOINT

(2) #5 RE-BAR TOP AND BOTTOM TYP.

(1) #4 RE-BAR TYP.

6X6-W2.9XW2.9 WWF

ELEV. 100'-0"

(2) #5 RE-BAR TOP & BOT. TYP.

2" X 4" KEY WITH #3 DOWELS AT 1'-6" O.C. (9' LONG)

EL. 97'-6"

GRADE

2" CLEAR

6"

2"

1'-4"

14'-5"

1'-4"

2'-6"

3" CLEAR

6' 1'-4"

REMINDER: PLACE 6" OF FREE DRAINING FILL UNDER ALL SLABS

TYPICAL SECTION A--A

(b) BOLT SECTION PATTERN

ELEV. 100'-0"

SEE DOWEL DETAIL FOR J HOOK

#4's @ 4" O.C. (TIES)

(4)-#6 DOWELS W/ 12" HOOK

SEE FOOTING SCHEDULE

HOOKE ALL FOOTING REBAR  
LENGTH OF HOOK = 12 X DIA. OF REBAR

2"-6"  
3"  
1'-0"  
3" CLEAR

2" CLEAR  
2 1/2"

A  
B

3 SECTION THROUGH PIER

(2) #4 RE-BAR TOP AND BOTTOM TYP.  
(PROJECT/DOWEL INTO WALL 1'-6")

6X6- W2.9x2.9 WWF

ELEV. 99'-6"

2" CLEAR

2'-0"

6"

5'-6"

7'-6"

3" CLEAR

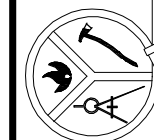
TYPICAL SECTION B--B

scale: 3/8" = 1'-0"

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(2) #4 RE-BAR TOP AND BOTTOM TYP.

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Job Description

WESCO MODEL FF-3

WL300  
TYPICAL

**Sheet Title**  
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Scale

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